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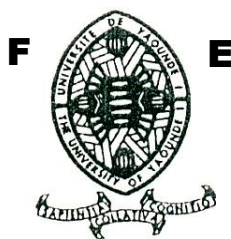
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DOCTORATE / PHD THESIS

THE INFLUENCE OF TEACHERS' CHARACTERISTICS AND SCHOOL ENVIRONMENT ON THE IMPLEMENTATION OF CLASSROOM ASSESSMENT PRACTICES IN ENGLISH SECONDARY SCHOOLS IN CAMEROON

*A Doctor of Education (PhD) dissertation submitted and defended on Friday 26th May, 2023
at the Amphitheatre 110.3 of the Faculty of Sciences of Education of the University of
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DEDICATION

This piece of work is dedicated to my husband,

Dr Agbor Ambang Antem-Ako

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There are individuals who warrant acknowledgement for their substantial contributions not only to the completion of this thesis but also the entire coursework involved. Without each of these individuals, this work wouldn't have been possible. I will forever be grateful.

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ABSTRACT

Teachers' classroom assessment practices are important elements in the educational system. The objective of this study was to examine the effect of teachers' characteristics (qualification, teaching experience) and school environment (class size, motivation and teachers' work environment) on geography teachers' implementation of classroom assessment practices in English Secondary Schools in Cameroon. A major problem in this study is the grading, feedback and normative paradigm in the Implementation of Classroom Assessment Practices by geography teachers in English Secondary Schools in Cameroon. The mixed method research design was used, with the questionnaire, observation and focus group discussions being the main instruments for the study. The sampling techniques use is the simple random for quantitative data and the purposive sampling for the qualitative data. A total of 278 teachers constituted the sample. The statistical tools used for the analysis is the one-way Analysis of Variance, with degree of freedom (df) 2, 275, at a 0.05 confidence level and the Pearson Product Moment Correlation coefficient, with degree of freedom (df) 276, at a 0.05 confidence level. It was discovered that the better the teachers' qualification and teachers' motivation, the better the implementation of classroom assessment practices. The research concludes that class size and teachers' teaching experience do not influence the implementation of classroom assessment practices in English secondary schools in Cameroon, while the teachers' work environment does influence the implementation of classroom assessment practices.

***Keywords :* Teachers characteristics, school environment, grading, feedback, normative paradigm in assessment, simple random sampling.**

RESUME

L'évaluation est un aspect clé de l'activité de classe. Ceci étant, la présente recherche avait pour but d'examiner l'effet des caractéristiques de l'enseignant, puis de l'environnement d'apprentissage sur la pratique de l'évaluation en géographie à partir de facteurs tels la qualification des enseignants, leurs expérience et motivation, ainsi que les effectifs de leurs salles de classe. Il s'agissait en outre d'analyser la portée de l'environnement de travail des enseignants sur leur pratiques évaluatives. Pour le dire plus clairement, dans son objectif majeur, l'étude visait à montrer comment les caractéristiques de l'enseignant (sa qualification et son expérience dans l'enseignement), ainsi que le milieu scolaire (les effectifs par classe, la motivation de l'enseignant et son milieu de travail) influencent l'application des techniques d'évaluation en géographie dans les établissements secondaires du Cameroun. Un intérêt particulier était alors porté sur la notation, le rapport de correction et le paradigme normatif. Pour atteindre cet objectif, une recherche mixte convoquant trois protocoles dont un questionnaire, l'observation et des entretiens de groupes a été menée. Des données quantitatives ont été collectées à partir d'un échantillon aléatoire de 278 enseignants, à l'inverse de celles qualitatives qui ont été collectées grâce à un échantillon raisonné. Deux tests statistiques ont été appliqués à l'analyse des données, notamment l'analyse de variance unidirectionnelle avec un seuil de 2,275, soit une marge d'erreur de 0,05 et le test de corrélation du moment de production de Pearson avec un seuil de 276 et une marge de 0,05. Il a ainsi été démontré que plus les qualifications de l'enseignant et sa motivation sont élevées, plus la qualité d'application des techniques d'évaluation est élevée. Du point de vue de l'environnement d'apprentissage, un rapport a été établi entre l'environnement de travail et l'application des techniques d'évaluation en géographie, ce qui n'est pas le cas de l'effectif et de l'expérience de travail de l'enseignant.

Mots clés: caractéristiques de l'enseignant, de l'environnement d'apprentissage, la notation, le rapport de correction et le paradigme normatif.

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LIST OF ACRONYMS

CK	:	Content Knowledge
DoE	:	Department of Education
GDP	:	Gross Domestic product
HMI	:	Her Majesty Inspector
LO	:	Learning Objective
NCME	:	National Councils on Management in Education
NCS	:	National Curriculum Statement
NEA	:	National Educational Association
NSAG	:	Non state Armed Group
PCK	:	Pedagogic Content Knowledge
ROAs	:	Records of Achievements
SAGE	:	Student Achievement Guarantee in Education
WTMST	:	Work Task Motivation Scale for Teachers

CHAPTER ONE: GENERAL INTRODUCTION

In December 1948, the United Nations General Assembly adopted a Universal Declaration of Human Rights specifically to help address problems faced by most of the underdeveloped countries, African countries included, such as illiteracy, poverty, low health status, and quality of life. Emphasis was placed on the attainment of Millennium Development Goals targets in education because they were seen as critical for human development. These targets include access to basic education for all by 2015, gender equality in access to educational opportunities, eradication of adult illiteracy, as well as, an improved, sustainable, and quality education (United Nations Development Program, 2002). Most African countries including Cameroon subscribed to the declaration. Most of these countries were mandated to improve the quality of their educational systems and access to basic education free. Many countries reacted to these expectations by improving their educational policies. For example, the Law of Orientation of Education (1998), implemented free basic education and emphasizes the need for improvement and management of an educational structure that promotes students' learning outcomes.

Brown (2002), highlights classroom assessment as one of the most crucial teacher professional development needs. Consequently, understanding teachers' ideas, views, perceptions and beliefs about assessment as well as the challenges associated with classroom assessment practices, is absolutely essential in planning and implementing appropriate teacher professional development. Teachers work in an intricate profession in which they are compelled to alter or preserve their evolving practice in relation to a wide range of factors. They often deal with external and internal contextual factors, such as student characteristics; how well they do this mediates the effect of their actions (Adams, 2002). The understanding portrayed here assumes that teachers, irrespective of their level of experience and competence, make what seem to them rational choices and decisions that reflect their attempts to promote students' learning (Adams, 2002). According to Mertler (2003), a large share of classroom time is allocated to assessment-related activities; hence identifying factors affecting teachers' classroom assessment practices becomes critical. The current research project attempts to address this issue by exploring various factors that influence teachers' practices. Assessment practices are contextually bound and complex, so understanding and producing insight into these practices require approaches that explore, in-depth teachers' opinions and

reasoning about teaching, learning and assessment based on specific educational contexts and accounts of experiences within them (Akyeampong, Pryor and Ampiah, 2006).

This introductory chapter will talk about the historical and contextual background of the study

1.1. Background of the study

1.1.1. Historical background

The education of an African child was the responsibility of every member of the society. Prior to the arrival of European missionaries and colonization, education in many African countries including Cameroon were informal. African children learned customs and traditions of their tribes through words, from mouth to mouth. Education in Africa, according to Akinpelu (1981), was to “reinforce the social ethnic existence of tribes in any particular country, and to prepare children and young people for their place in society” (p.113). The African training curriculum was designed to suite norms, needs and practices of any given society, so the society contributed to the instructional content (Adeyemi & Adeyinka, 2003).

The historical evolution of the different variables in this study will be looked at from a distant past. This analysis will help us to understand what happened in the old. Historically, teachers have used testing instruments to transmit to students and their parents what content and skills are really important for the students to master. This reporting tended to be in the form of grades. The form and design of assessment sent subtle messages as to what was important (Haldane, Downing, & Rodriguez, 2002). However, educators have had divided opinions on the best methods of assessing students’ learning outcomes. Some educators advocate the use of traditional forms of assessments such as, multiple choice test others advocate for more contemporary approaches to assessments such as portfolios, journal critique, and research essays. Traditional forms of assessments are very efficient at measuring knowledge standards and targets, especially when there is much knowledge to be measured. Such tests are used for measuring students’ knowledge, understanding, and application, which are essential skills that students need in order to succeed in their studies (MacMillan, 2008). During the last two decades alternative assessment methods were developed and implemented into educational practice as a result of new discoveries and changing theories in the field of student learning. These innovative methods in student assessment have been supported on the basis that they produce active, reflective, self-reliance and self- regulating learners. These new methods of student assessment have brought a lot of changes in the way educators perceive student

learning and assessment (Elango, Jutti, & Lee, 2005). Teachers in most countries were advised to change their focus and adopt alternative forms of assessments. This changing perspective was driven by the need to use classroom assessments that recognize, teach, and assess knowledge, skills, and abilities that students need beyond classroom environments. Authentic forms of assessments were therefore introduced because of their potential to test complex mental abilities like extended writing and problem-solving skills that cannot be assessed by using traditional forms of assessments (Reynolds, Livingston, & Willson, 2009; Waldrip, Fishers, & Dorman, 2009).

The different variables to look at include: teacher qualification, which consist of academic and professional qualification, teaching experience with indicators such as number of years of teaching, professional development programs and number of years of setting and marking of national examinations. Class size is also another variable with indicators, such as, students-teachers ratio and number of students in class; teacher motivation with variables like job satisfaction, recognition through awards, salary increase; and teacher work environment with variables such as, number of teachers per office and teacher safety and respect for them.

Teacher qualification

The professional work mostly begins by reflection upon the nature of the mind to be educated, endeavouring to find those laws and principles according to which its normal activity is regulated in order that we may intelligently wield the means of stimulation to secure its most natural and speedy development. The mind is an inert object which can be abstracted from all concrete cases, and by an analytic process separated into its logical parts. As a result of this treatment, we have a formal science of psychology, dealing with the powers and attributes of the so-called faculties of the mind, in the same way that we have a formal science of mathematics, physics, and so on, that treats characteristic subject-matter in a logical way. Training schools regard the mind as a growing, developing, assimilating power, and it is sought to become acquainted with it while under these natural conditions of activity. A knowledge of the mental life gained in this latter way will be very different from that acquired by purely formal study, where the mind is considered apart from all concrete instances, and laws and principles are deduced which may, be applicable to it in general, but which have no reference to the peculiar and distinguishing characteristics of specific instances, nor of the manifold modifying conditions under which all activity, as induced by educational agencies, occurs. It should be, and usually is, the aim to lead the prospective teacher to become

somewhat familiar with the concrete and developing mind under those conditions which necessarily exist in all school work. It is generally true that those who seek the normal school have not the time nor the breadth of philosophical training and culture to enable them to make the study of formal psychology profitable, although it would be most valuable for one who could spend years in thought and reflection upon the matter, and who would not need to make practical application at once, of the principles which he had considered. It is coming to be appreciated that while a teacher need not, in order to do most intelligent work, be learned in the logical principles and divisions of mind activity, yet he does need to become acquainted with the action of the mind as it is manifested in the many concrete cases which are constantly before him in his daily work. He must come to feel that the mind acts according to law, definite, exact, and unerring, as well with reference to the subject-matter by which it is disciplined in the schools as to its reaction upon sense stimulus. He must be trained to observe the effect of all external conditions, bodily and otherwise, which do in any way modify or affect the mental and moral condition of the child. This however does not make the teacher to become imitative and formal in his own class room.

In the eighteenth century there seems to have been no adequate conception of the training of mind as being amenable to the rules and methods of science. It was probably not thought that the mental life was subject to laws the nature of which could be ascertained, and which would have to be followed if there would be any success in leading the mind to attain those ends which should be kept constantly in view in all educational work. A teacher's success depended on his instinctive apprehension of the peculiar nature of each pupil's mind; and there would not be much opportunity to increase his success by careful observation and study of a large number of children. The first recognition of teaching as an art, founded upon a rather indefinite science of the mind, seems to have been shown by the Jesuits in the seventeenth century, when they required every individual who should teach in their schools to spend two or three years as an apprentice, observing the ways of a master, who was supposed to have become familiar with the best art of teaching through his own experience in observation and experimentation.

Ratich (1886), urged that teaching was an art, and that those who were to practice it must become familiar with its rules and devices before trying it, lest those whom they should attempt to instruct should suffer by their ignorance and less skills, until experience should have taught them wisdom. In the eighteenth century Francke embodied this idea in his schools

at Halle, requiring that all his teachers should, before being fully admitted to the profession, spend two or three years in observing others teach, and in reflecting upon the difficulties to be met with and devising means to overcome them. This was the forerunner of the "teacher's seminary," which latterly spread throughout Germany and all the progressive countries of Europe. Previous to 1833 there were in France, according to Guizot, forty-seven primary normal schools, while at present there are one hundred and seventy-one well-equipped institutions, all of which have become governmental institutions. In 1827 David Stowe established the first normal seminary in Great Britain, at Glasgow; and such great popularity did this attain that other institutions of the same kind sprang up rapidly throughout Scotland and England, while training colleges and professorships of pedagogy in the universities have also been established. The first normal school in the USA began operations at Lexington, Mass., in 1829, and now there is not a State in the Union that has not several of these schools, supported at public expense.

The first teacher training college in French history of education of teaching, Jean-Baptiste de la Salle's 18th century brothers of the Christian schools, had non-clerical male teachers teaching poor and middle-class children. Based on Greek philosophers' Philosophy of education and teaching, re-introduced by Islam, spirituality was not the only reason for the basis of education. Teacher education and training had been clerical, this was western history of education's first secular teacher training college. With education reforms in education history, educational theory of teacher education required of teachers an understanding of the human mind and the theory of education, knowledge of sciences and educational methods of teaching. During the colonial era and into the first decades of the 1800s, most teachers had a basic education combined with the professions as farmers, merchants, etc. the usual standards for being trained and or hired was as straight forward as passing a review by the local school board or town council, and possibly passing a basic competency examination. These educational philosophies and theories of education on teacher education became the norm in western history of education, teacher training establishments' first normal schools in the history of education and training of teachers. Teacher education progress educational history, in history of education and history of teaching the system of education required and enabled knowledge of in-service experience, certificating for teachers, continuing professional development for teachers in teaching. This non-uniform system of teacher education and training enabled teachers, while teaching, at teacher seminars to refresh and increase their knowledge of theory of education and method of teaching. Exchanging ideas among teachers,

Napoleon, in history of education and teacher training, uniformed professional teaching, adopting Germany's teacher seminars, in western history of education and in western history of education and training of teachers, established the first uniform teacher education system.

Neither the USA's educational history nor British history of education did in educational philosophies systems of education include formal teacher education and training, although Elizabeth-I had introduced teachers' moral teaching fitness certification in teacher education. In England's history of education and teaching, in early 19th Century, Joseph Lancaster and Andrew Bell founded the lancastarian teaching method of teacher training, in a monitorial system of teacher education and training senior students ('monitors') receiving teaching from tutors were teaching junior students, acting as teachers. In Scotland's history of education and teaching, in the 17th Century free education was compulsory. In late 19th Century Germany's teacher education and training, influenced David stowe's founding the Glasgow normal seminary for teachers.

Progress in teaching and teacher training began with Horace mann's Massachusetts normal schools in USA's educational history, and in Britain's history of education by the churches and voluntary Organisations' teacher training colleges and teaching the colonials.

In philosophies of education arguments followed on teacher education and educational history: should persons of lower English social class attend teacher training colleges and give Might teachers' teaching not influence young French minds with liberal ideas?

In Europe's history of teacher education and training, Rosencrantz's 19th century philosophy of education emphasised "philosophical and psychological data this resembling Islam's university faculties developed into separate teaching disciplines. In Sweden's history of education and training, Pestalozzi furthers the progress of systems of education, advocating, formal teacher training colleges. Germany's Froebel, and Alexander Bain's 'Education as a science', favoured education of teachers through teacher training colleges; teacher education adopted what philosophies of education in western educational history and teaching had lacked- Herbart's pedagogical emphasis in teaching on five formal steps: preparation, presentation, compassion, generalisation, application.

Germany's teacher education and teacher training; Derwent coloridge and James kay shuttle worth in Britain, Mann in the USA broadly agreed: teacher education and training should

emphasize techniques of teaching- “not only the subjects of instructions, but also the method of teaching”. Jules Ferry laws’ implemented compulsory education established teacher education and training in late 19th century. French history of education: teacher education and training, by law, should be through formal teacher training colleges. English speaking countries’ history of education and teaching, formal teacher education and training, began with the University of Edinburgh’s creating a chair in education, with St Andrews; in the USA’s history of education, e.g., Henry Bernard, Nicholas Murray Butler, followed. In western history of education England’s progress involved pedagogy and Herbart Spencer’s teaching techniques in teacher education and training.

In the USA’s history of education and teaching the Darwinian hypothesis (as before later scientific evaluation) influenced John Dewey at the university of Chicago laboratory schools, taking into account from other disciplines what were considered relevant in teaching to child development. Brown university founded an education department. New York teachers college, founded in 1888, was incorporated into the Columbia university, 1893, established its teacher training college is to afford opportunity, both theoretical and practical for the training of teachers, of both sexes for kindergartens and elementary schools and Secondary schools, of principals, supervisors, and superintendents of schools, and of specialists in various branches of school work involving normal schools and colleges”- It became the basis in western history of education and teaching, of teacher education and teacher colleges.

In most British common-wealth’s history of education and system of teacher training, entry into teacher training came to require senior secondary education at high school level of British grammar school education with national matriculation or Ordinary and Advanced General Certificate of Education (GCE) examinations or equivalent.

Teaching and the necessary qualifications for good instruction have been disputed in the United States for over a century and a half. Plagued by a relatively weak status and state control, teaching failed to develop as an independent self-controlled “profession.” Unlike medicine and law, teaching lacks a clear body of knowledge that every teacher should know, moreover unlike most other professions, teachers are denied the responsibility to control entry into the profession. In other words, since the nineteenth century, determining what good teacher training should be has rested in the hands of local Sociologist

Magali S. Larson defines a profession as an “occupation with special power and prestige . . . in which society grants rewards because professions have special competence in esoteric bodies of knowledge linked to central needs and values of the social system.”

During the nineteenth century, attempts by educators to standardize the criteria for what qualified teachers should know were overshadowed by debates about who should control teacher certification. Across the country, local communities and to a lesser degree, state governments determined the qualifications teachers needed to have. Early state constitutions and/or state legislatures vested local township officials with the power to examine, certify, and supervise teachers with relatively little oversight by state officials.

Before the introduction of western education to African countries, the Africans had their own system of education and Cameroon was not an exception. This system of education is derogatorily called Traditional Education, though a greater portion of this system of education was informal. It was acquired by the youths from examples they followed or saw from the elderly people in the society (Dewey in Ornstein and Lewine, 1998). This system of education grew from the environment of the people and it was related to the pattern of work in the society. Despite its apparent informal nature, traditional education had clear goals and objectives, such as believes that education is for every child and exists for the purpose of strengthening the community. There were no dropouts because every child was given the opportunity to work at their space and steps were taken to ensure that there was promotion from one step to the next in child’s education and well tested teaching methods were involved. The methods of testing included games, riddles, story-telling, legend and acting all related to culture and tradition of the tribe (Farrant, 1980).

The success of this method of teaching depended on the quality of adult (teacher) who taught. Technical skills were learned by apprenticeship and principles, while the teacher pupil ratio was good, relative to the traditional methods in education in Africa in general and Cameroon in particular, and the need for different teachers as the children matured was reorganized. Hence, the quality of a teacher was of great importance in the African Traditional Education (Cameroon in particular), as it greatly influenced the youths’ (students’) achievement.

By the late 1890s, educational leaders across the country began a slow but deliberate process of “professionalizing” education, meaning

1. Centralized control of teacher certification training and qualifications;

2. Development of a tiered structure with teachers on the bottom, administrators in the middle, and professors, deans and schools and colleges of education, and some state education leaders (e.g. state superintendents) on the top;
3. Specific levels of training; and
4. Development of structured teacher education curriculum.

State superintendents of public instruction across the country sought, through legislative authority, to centralize as many functions of education including teacher certification, training, and qualifications as possible. Such efforts were aided by and at times thwarted by important political, social, and economic factors. Between 1890 and 1930, two major factors affecting efforts to the professionalization of teaching and the qualifications for teaching were demographic shifts and economic trends. During this period, national school enrollment experienced unprecedented growth. In 1890, public school enrolment in first grade through twelfth was a little more than thirteen million students, while in 1921 it had ballooned to more than twenty-three million. As enrollments grew, so did the number of years children spend in school. As high schools became more common, their attendance rates soared. Naturally, as school enrollments increased so did the demand for teachers. Yet, normal schools and colleges and universities lacked the ability to train enough teachers for the overwhelming demand. As a consequence, state educational leaders frequently were forced to continue the practice of issuing certificates based on an examination, which in some cases only required a small amount of professional training.

Population movements also influenced how states and local communities dealt with the issue of teacher qualifications. At the beginning of the twentieth century, as both the U.S. population and school enrollment increased, the number of people living in rural communities decreased. Throughout most of the nineteenth century, rural communities had wielded enormous power in maintaining control over their schools and teacher certification in particular. However, by the beginning of the twentieth century, their power waned as urban areas grew. With shrinking school enrollments and diminished political clout, state legislatures and state educational leaders' consolidated schools. While local communities often fought centralized efforts, they also frequently found themselves in need of increased financial assistance from the state to maintain their elementary schools and/or to operate high schools. Ultimately, these trends forced many rural school systems to consolidate. Amid these social and economic changes, this period also witnessed the rise of a new breed of educational

leaders, “administrative progressives.” Unlike earlier educational leaders, which included college presidents and faculty across a range of academic disciplines, David Tyack argues that administrative progressives mainly included faculty from education colleges and schools, city and county superintendents, state education officials, officers in state associations, and U.S. Bureau of Education staffers. Using their influence with state legislatures, administrative progressive gradually centralized educational authority transferring increasingly more power to state superintendents of public instruction and/or state boards of education. With increased authority, state educational leaders pushed for greater standardization in teacher training. The increased requirements for teaching certificates, expanded the duration and influence of teaching institutions, and began to set minimum professional requirements.

Teacher qualifications grew out of tensions caused by demographic shifts, economic trends and efforts to professionalise education during the late nineteenth and twentieth century. Instead of defining what every teacher should know, creating a standard curriculum, and outlining the necessary training to satisfy these requirements, teaching and the requirements to be a teacher have often times been shaped by the economic and demographic challenges facing the United States. The interplay of these professional efforts and outside factors produced a system of teacher education that was quite unlike that of other professions. Organisations and systems of belief, just as radical and reformist politicians and thinkers have looked to the schools to disseminate their particular brands of truth. In medieval and post-Reformation Europe, for example, there was considerable concern with the qualifications and background of teachers, mainly but not entirely with reference to their religious beliefs. In 1559 Queen Elizabeth I of England issued an injunction that prohibited anyone from teaching without a license from his bishop. The license was granted only after an examination of the applicant’s “learning and dexterity in teaching,” “sober and honest conversation,” and “right understanding of God’s true religion.” Thus, the certification of teachers and concern for their character and personal qualities are by no means new issues. As high school attendance grew so did high school graduation (however not at the same rate as high school attendance). This development created a new baseline requirement for state educational leaders to demand a change in requirements to teach. By the 1920s, high school graduation was becoming a norm in many states for a certificate to teach. Also, as high school curriculum expanded, demand for teachers with a more specialised background correspondingly increased. This in turn raised the bar for certification of many high school teachers.

Another critical factor to the development of teacher qualifications in the late nineteenth and early twentieth century was the centralized authority and increased power of state educational authority. Prior to 1898, only three states operated state systems of certification where the state set all the rules and issued all the certificates. By 1921, this total had jumped to twenty-six states and by 1937 forty-one did so. With centralised authority came increased academic and professional requirements, more standardisation of examinations and grading, and a multiplicity of teaching certificates. In addition to these developments, there were also increases in the number of teachers attending and graduating from normal schools or colleges and universities. The development of a more professionalised field of teaching set the stage for increasing requirements for teaching during the nineteenth century to 1920s.

Teacher Training in Cameroon as a former colony of Germany and later of Great Britain and France, Cameroon is impaired by a difficult history and heritage. Opposing colonial powers have left different school systems, which lack a uniform language, certification and accreditation. Consequently, the status quo of education is unsatisfactory and the system has to cope with many dropouts and failed graduates (Westbrook 2013; Eloundou-Enyegue 2004). Like many developing countries in Central Africa, Cameroon has a high demand for teachers (Mulkeen 2010; UNESCO 2010), resulting from the high birth rate, leading to 42.5 per cent of its citizens being under 15 years of age. The demand for qualified primary school teachers is extraordinarily high, particularly in rural areas, where living conditions are poor and the birth rate is even higher than in towns.

The reformation of the teacher training system in 1995 proposed one- to three-year courses for teacher training, depending on the candidate's qualifications, and the enhancement of the status of teachers in general by dispelling those staff holding only primary school qualifications. Nowadays, there are teacher training colleges (TTCs) in almost all 58 divisions of Cameroon; three higher training colleges for secondary school teachers (École Normale Supérieure (ENS)); one training centre for vocational training teachers (École Normale Supérieure de l'Enseignement Technique (ENSET)); and various university faculties (Tchombe 2010). However, with the government policies of reducing the student- teacher ratio, many more training institutions have been opened, such as Maroua, Kumba and most recently, Bertoua. Teachers are still often unqualified and overwhelmed in a setting marked by a dearth of didactic material and weak training structures (Lewin and Stuart 2003; Riley, Craig, Postona and Flynn 2000).

Teaching experience

Experienced teachers have a richer background of experience to draw from and can contribute insight and ideas to the course of teaching and learning, are open to correction and are less dictatorial in classroom. Teachers' experience and student achievement was that students taught by more experienced teachers achieve at a higher level, because their teachers have mastered the content and acquired classroom management skills to deal with different types of classroom problems (Gibbons et al., 2010). Furthermore, more experienced teachers are considered to be more able to concentrate on the most appropriate way to teach particular topics to students who differ in their abilities, prior knowledge and backgrounds (Stringfield & Teddlie, 1991). Teachers' attendance of in-service training is one of the indicators of experience. Teachers' motives to attend in-service training can be manifold e.g. increase in salary, career planning, keeping up with developments, filling in lacunae, removing insecurity and meeting colleagues.

In the Science Education Project in South Africa (SEP), the objectives were mainly formulated by the developers after having consulted various experts who had experience with Education in Africa. The teachers in this program had been and did not have any experience with practical work. Only in a later stage of their in-service training course they had a better idea of the possible content and methods, did formulating objectives of their own lessons become part of the program (Fullan, 1992). Therefore, the more the teachers know about students, the better the teachers can connect with them and the more likely they will be able to benefit from the teachers' experience in reconstructing their world. The knowledge that teachers need about students in order to connect with them is gained through interaction. For many reasons, measuring the real impact of experience on a teacher's effectiveness is complex, more so than measuring any other teacher attribute. Consequently, many well-constructed research attempts to interpret the relationship between experience and effectiveness have produced varying results that reveal no particular pattern.

Murnane (1996), found that teacher effectiveness improves rapidly over the first three years of teaching and reaches its highest point between the third and fifth year but found no substantial improvement after year five. In contrast, a small number of studies suggest that teacher experience effects may be evident for a longer period of time. Murnane & Phillips (1981), state that experience had a significant positive effect on elementary student achievement among teachers during their first seven years of teaching. Ferguson (1991),

reveals that at the high school level, students taught by teachers with more than nine years of experience had significantly higher test scores than students whose teachers had five to nine years of experience. Rivers & Sanders (2002), suggest that teacher' effectiveness increases dramatically each year during the first ten years of teaching". In the extreme case, Clotfelter et al., (2007), found evidence of growing teacher effectiveness out to 20 or more years in their analyses of North Carolina teacher data although more than half of the gains in teacher effectiveness occurred during the first few years of teaching.

Used in China for centuries, standardized testing was originally used in connection with government job applications. The examinations tested individuals in six areas, including music, archery and horsemanship, arithmetic, and writing. In later years, standardized tests also included testing on military strategies, civil law, revenue and taxation, agriculture, and geography. The first school examinations were held in the 16th and 17th centuries, when diocesan visitations were made. Teachers were questioned on their learning and pupils were tested for attainment. Examinations were required by statute in many schools, including Tonbridge (1564), and St Albans (1570).

In the wake of the Industrial Revolution, when schools began to educate many more children as they transitioned from working on farms and in factories, teachers began to use standardised tests to test students. Between 1840 and 1875, education evolved into more formal and standardized practices and teachers replaced oral testing with written examinations. From 1875 through the end of World War I, standardized tests were developed to determine student preparation for college. In 1890, the president of Harvard College proposed a national entrance exam for American colleges.

In England, attendance at school was not compulsory until the late 19th century. The first public examinations for schools were introduced in 1858 in response to a demand from schools themselves as a way of marking their pupils' attainment. Schools approached universities, such as Cambridge and Oxford and asked them to produce exams that boys could take 'local' to where they lived. Girls were not officially permitted to enter public examinations until 1867. The University of Cambridge Local Examinations Syndicate – now known as Cambridge Assessment – was officially established on 11 February 1858. Its first exam took place on 14 December 1858. There were two examinations: the Junior (for students under 16 years of age) and the Senior (for students above the age of 16), and they took place

in local 'centres' - schools or any suitable venues like church or village halls. The examinations were set and corrected by teachers.

Class Size

Educators have noted the benefits of class size since classical times. Isocrates opened an academy of rhetoric in Athens around 392 B.C. to train Athenian generals and statesmen, and he insisted on enrolling not more than 6 or 8 students in his school at a time. Edward J. Power (1996) admitted that Isocrates admitted 'only a few students of his classes because of his extraordinary concern for care.' Quintilian, a rhetorician writing in the Roman Empire around 100 CE, cited the practices in Socrates' school as evidence that a caring education required small class sizes. Quintilian argued in institutes of oratory, as Edward Power summarise, the book's thesis, that 'care had nothing whatever to do with discipline: it meant simply that only a few students at a time could be taught effectively.' The twelfth century rabbinic scholar Maimonides recognised that class size was correlated with students' achievement. He wrote 'twenty-five children may be put in charge of one teacher'. If the number in class exceeds twenty-five but is not more than forty, he should have an assistant to help with the instruction. If there are more than forty, two teachers must be appointed.'

Erasmus, the Dutch Humanist, wrote in his 1529 study of education *De Pueris Instituendis* about the advantages of private tutoring over ecclesiastic and public schools, where he believed classes had grown too large. He explained that "his standard of efficiency demanded a small school conducted by brilliant scholars ...". Erasmus recognised that most parents would nevertheless have to settle for large class sizes because of the financial costs of such tutoring. At the turn of the 20th century, the philosopher and educational theorist John Dewey explained that in his ideal school, class size should be very small. "For the purpose of convenience the children are subdivided into small groups of eight to twelve according to the kind of work and the age of the children. It is expected that the teacher will give attention to the specific powers and deficiencies of each child, so that the individual capacities will be brought out, and individual limitations made good. Around WWI, classes of 5 or more students were common in New York City, but dropping since that time. In 1930, the average class size in elementary schools was around 38 students, with classes for handicapped students averaging about 25 while other classes in the same building might be well over 45. This is set in contrast to some teachers in the 1890s facing 75 students daily. By the 1930 there was a public commitment to provide better individual attention to each student. Arnold Campbell the superintendent of New York City Board of education at that time, opined that

the ideal size of classes for normal students should be about 30 students. Kurt Vonnegut was a passionate advocate for class reduction. He argued that they have some of the worst schools in the world. According to him the classes are too big. His definition of utopia is very simple: classes of 15 or smaller out of this, a great nation can build out.

In sub-Saharan Africa, the average class size in public primary schools' ranges from 26 pupils in Cape Verde to 67 in Chad. This is much higher than average class sizes in the European Union or OECD member countries which are below 20 in the majority of countries and below 30 in all countries, UIS/IB/2012/9. In Guinea, Mali, Niger and Togo, multi-grade classes are on average larger than single-grade classes. There are over 70 pupils per class in Mali where nearly 20% of pupils are taught in multi-grade classes. Four countries (Burundi, Malawi, Mauritius and Rwanda) report having no multi-grade classes. The vast majority of multi-grade classes cover two grades. However, Cape Verde, Chad, the Congo, Guinea, Madagascar, Mali and Niger report classes which cover three or more grades. In Madagascar and Mali, up to one-quarter of multi-grade classes have at least three grades.

The existence of multi-grade classes can suggest shortages of teachers, classrooms, or low enrolment numbers. In areas where there are insufficient teachers or classrooms, schools may have little choice than to merge classes of different grades. This may be the case for countries where multi-grade classes are on average substantially larger than single-grade classes, for example in Guinea, Mali, Niger and Togo. In these countries, there are on average about 10 more pupils in multi-grade classes than in single-grade classes. This difference ranges from an additional 7 pupils in multi-grade classes in Guinea to 16 more pupils in Mali. In contrast, in sparsely populated and remote areas there may be few children of any given age, resulting in small classes in each grade and even, in some cases, small multi-grade classes. This is the case in Cape Verde and Sao Tome and Principe, where the average size of multi-grade classes is very low, with just 15 and 17 pupils respectively. In the Congo, single-grade classes are overall larger than multi-grade classes with on average 18 pupils more. The schools with multi-grade classes are, in fact, located in remote rural or forest areas where there are insufficient numbers of pupils to justify single-grade classes.

Teacher Motivation

Questions about human behaviour and the reasons behind this are as old as human life and can be traced since Aristotle era. According to Aristotle's view physical and emotional parts related to the body and nature, were motivational and provided motivation for the growth and

physical relaxation and sensory experiences, such as pleasure and pain (emotional). These two parts together, were the basis of irrational and impulsive forces of motivation. The logical part includes all rational aspects of soul and related thought that was intellectual and had Will's feature. First theoretical justification for the proposed activity has been motivated by the desire of body, pleasure and pain sensation and voluntary efforts. Hundreds of years later, Greek spirit of the tripartite soul fell to the two components; were included passion and intelligence of the mind and body. Thomas Aquinas suggested irrational impulses motivating the body provides and based on enjoyments. The mind provides incentives that are reasonable and are based on the will, the dichotomy here is to be emphasised.

After the Renaissance, Rene Descartes, with the distinction between active and non-active aspects of motivation, the body is not operating as motivation, and the desire would be the active agent. From this perspective, the body completely is in physical nature and the food was motivational and through the senses, his reflections and physiology will respond to the external environment and used physiological analysis to understand the physical motivation, nature of the mind, mental, spiritual and mental benefits that will be targeted. Determination always is the motivational force that determination begins operation and he was directing it. Descartes allocate impulse exclusive power of the will of man, the first high theory impulse for preparing philosophy. Putting aside the question of where the motivation came from, philosophers initially had to determine where their determination comes. And the complex situation created for the philosophers. The new science of psychology, motivational principles found in search is less confusing and more machine. After of that were not performed attempts at philosophy and in the field of physiology and biology began.

In the seventeenth and eighteenth century, Hobbes said the reasons people give for their behaviour is the behaviour of his desire to gain pleasure and avoid pain. Option of "hedonism" still plays a major role in motivating certain assumptions.

Teacher Work Environment

Educators, just like any other worker, have the right to work in an environment in which they feel valued and respected, where they may actively support learner's development and learning and where they are free from fear, threat and harm. The office concept has been around since organized civilizations have been in existence and has been through many evolution and over history to fit the needs of the times and will be looking at variables such as number of teachers per office, teachers' safety and respect for teachers. The word office stems

from the Latin word *officium*. An *officium* was not necessarily a place, but rather a mobile work space. Taking a walk, through history there are some broad changes in the office environment that occurred from early civilizations to the most recent trends for office space, as follows: The High Middle Ages (1000–1300), saw the rise of the medieval chancery, which was usually the place, or office, where most government letters were written and where laws were copied. The rooms of the chancery often had walls full of pigeonholes, constructed to hold rolled up pieces of parchment for safekeeping or ready reference; a precursor to the book shelf.

The Industrial Revolution (18th and 19th century), saw the rise of banking, railroads, insurance, retailing, oil, and the telegraph industries. To transact business, an increasingly large number of clerks were needed. Most of the desks of the era were top heavy with paper storage bins extending above the desk-work area, giving the appearance of a cubicle and offering the workers some degree of privacy.

The Midpoint of the 20th Century brought to light that an efficient office required discretion in the control of privacy. In 1964, the Herman Miller (office equipment) company engaged Robert Propst, a prolific industrial designer, who came up with the concept of the Action Office which later evolved into the cubicle office furniture system.

The working environment of teachers is extremely important to them and, ultimately, to their students; teachers are more satisfied and intend to stay longer in schools with a positive work environment, regardless of the student demographic characteristics of the school (Johnson et al, 2012). Teachers are an integral part of the education system and are expected to deliver quality education, yet their right to conducive working conditions is often ignored. Over the past decade, multiple research studies have noted that the status of teachers has declined steadily impacting not just the recruitment and retention of teachers (European Union, 2013; Hakanen et al., 2006; OECD, 2005) but additionally impacting teachers' motivation, effectiveness, and job satisfaction as well as students learning opportunities (Bascia and Rottmann, 2011).

The working condition of teachers is of vital importance and a critical issue in education planning and policy-making discourse. Poor teacher working conditions have been significantly linked to teachers quitting their job in several countries, including Poland, Estonia, France, and the Netherlands (European Union, 2013) and poor perception of teachers

is being highlighted as being a deterrent to joining the profession (Asthana and Owen, 2018). Researchers have observed a significant increase in rates of teachers leaving the profession in England (Worth and Lazzari, 2017) to the tune of 30% in their first five years of employment (Weale, 2016) and America to a staggering 40% amongst all recently recruited teachers (Aspen Institute, 2007). Sutcher et al. (2016) highlight that globally only Singapore, Finland, and Ontario, Canada observe slow teacher attrition numbers in the range of 3-4% annually. Despite SDG 8, which promotes ‘full and productive employment and decent work for all’, the Global Status of Teachers and Teaching Profession Report, 2018 highlights that ‘world teachers are increasingly employed under precarious and shoddy conditions, part-time contracts are on the rise, and there is a growing lack of respect and support for one of the world’s most essential professions’ (Stromquist, 2018, p. 5)

Classroom Assessment

In the early 20th century, public education embraced a number of innovations that were grounded in the best thinking of the day. Many of these newfangled ideas focused on efficiency, with the goal of mass-producing students who could read, write, and compute at a basic level. This approach attempted to sort the raw materials (the children) so that they could be treated somewhat as an assembly line. Teachers were viewed as workers whose job was to carry out directives from their superiors the efficiency experts of schooling (administrators and researchers), (Marcus, C. 2000). It was only logical to develop standardized tests that could scientifically measure the “product” rolling off this educational assembly line.

Improving the academic achievement of students from primary to senior secondary schools has been a major concern of educators in different parts of the world. In the United States for example, academic achievement of K-12 students has been addressed since the 1800s. Since that time, different educational innovations have been tested with a goal to enhance student achievement (Marzano, 2006). Resnick (1982) pointed out that test-based reforms can be traced back to the middle of the 19th century when Massachusetts state superintendent of instruction used written examinations as a means of holding public schools accountable for their results (as cited in Miller, Linn, & Gronlund, 2009, p, 4). Historically, teachers have used testing instruments to transmit to students and their parents what content and skills are really important for the students to know. Although this reporting tended to be in the form of a grade, the form and design of assessment sent subtle messages as to what was important (Haldane, Downing, & Rodriguez, 2002). Educators have had divided opinions on the best

methods of assessing student learning outcomes. Although some educators advocate the use of traditional forms of assessments such as, multiple choice tests and other forms of objective tests, others advocate for more contemporary approaches to assessments such as portfolios, journal critique, and research essays. Traditional forms of assessments are very efficient at measuring knowledge standards and targets, especially when there is much knowledge to be measured. Such tests are used for measuring students' knowledge, understanding, and application, which are essential skills that students need in order to succeed in their studies (MacMillan, 2008). During the last decade alternative assessment methods were developed and implemented into educational practice as a result of new discoveries and changing theories in the field of student learning. These innovative methods in student assessment have been supported on the basis that they produce active, reflective, and self-regulating learners. These new methods of student assessment have brought a lot of changes in the way educators perceive student learning and assessment (Elango, Jutti, & Lee, 2005). As time went on, teachers were advised to change their focus and adopt alternative forms of assessments.

The changing perspective was driven by the need to use classroom assessments that recognize, teach, and assess knowledge, skills, and abilities that students need beyond classroom environments. Authentic forms of assessments were therefore introduced because of their potential to test complex mental abilities like extended writing and problem-solving skills that cannot be assessed by using traditional forms of assessments (Reynolds, Livingston, & Willson, 2009; Waldrip, Fishers, & Dorman, 2009).

In the 21st century, therefore basic literacy, numeracy, and content knowledge are no longer enough. According to Marcus Conyer (2000) and many other experts, if students are going to be able to negotiate the complexities of contemporary life, they need to be able to think and read critically, express themselves using digital tools, and solve complex problems. It's not enough for students to be able to recall what they have memorized; they need to be able to transfer what they have learned to new situations. This calls for applying the best thinking of today, from fields such as cognitive science and educational technology, to update our approaches for teaching and assessing what students know and are able to do.

Classroom assessment is as old in Cameroon as the development of skills. During the pre-colonial era, skills were acquired simply by watching parents cook, catching fish, carpentry, building, tapping, etc, and the child learns by doing, known today as 'learning by doing'. There were no formal class examinations but after watching for over a considerable period of

time the child is assigned a task to do from which corrections are made and learning was possible. During the German era, both an oral and a written examination sanctioned the completion of the initial studies. Given the relative absence of accidents among official candidates and the large number of receipts among private-education candidates, the level of such candidates was not excessively high. The lack of German training could normally have led to a considerable desecration. However, it is necessary to cease from judging these tests with the demands of today. Above all, the teaching body was composed of European teachers assisted by natives, to make suitable results. In mission schools, it was usually consisted only of local monitors whose level of training and the colonizer's language were not adequate enough for the first time to facilitate the task (Stoecker 1986: 224).

1.1.2. Contextual background

The contextual background of this study describes the state of affairs, what's happening with the variables in the area of study at the time of your study. It paints a picture of what is happening with teachers' qualification, teaching experience, class size, teacher motivation and office space in Cameroon, as shown below:

Teacher qualification in Cameroon

Law No 2004/022 of 22 July 2004 to lay down the rules governing the organisation and functioning of private education in Cameroon. Chapter 1 of the general provision on section 3, states that training institutions shall pursue the same objectives as those of public schools that is, providing civic, physical, moral, intellectual, vocational and technical training to young Cameroonians. In this respect, they shall implement the duly approved official or autonomous syllabuses and prepare the pupils and students for the corresponding certificate examination. For training schools whose courses prepare students for official diplomas, the state shall ensure that quality and pedagogic standards are respected. Only the state may confer diplomas. Secondary school teachers are trained solely by the state. The first teacher training college was created on the 3rd of September, 1961, and ENS Bambili was created in 1966. These two training institutions under the tutelage of the University of Yaoundé 1, have trained teachers solely for government secondary schools and few candidates came in from private institutions at the request of such institutions.

The recruitment of public secondary school teachers is carried out through selection. This selection or recruitment of teachers can be done through interviews, study of files, but especially and preferably through competitive written examination (Tsafac, 2003). The above

assertion is also supported by decision number 04/0252/MINESUP/DDES/PEEX of May 2004, which launched the competitive entrance examination and the selection for admission into year one, second cycle of Ecole Normale Supérieure (ENS) Yaoundé. Given the high demand of teachers with the increasing number of schools as a result of population increase, the government is progressively opening new higher teachers training colleges in the country. Today Cameroon has over seven training institutions for secondary school teachers. The higher teachers training colleges have both the 1st and the 2nd cycles. To qualify for training into any of the higher teachers training colleges, the applicant for the 1st cycle must have at least 5 Ordinary level subjects excluding religious knowledge with at least 2 Advanced levels, including major subject of the department soliciting admission into. The duration of training for this cycle is 3 years. The duration of training for the second cycle is 2 years and the applicant must have a bachelor degree in the corresponding departments or any equivalent recognised by the ministry of higher education. A competitive entrance examination is organised by the ministry of higher education and only the successful candidates enter into the training institutions. The certificate or diploma obtained after training is DIPES1, DIPES II, DIPCO and DIPEN II.

Teachers are also trained in the faculty of Education in some universities in Cameroon, such universities include the universities of Buea, Bamenda and Ngoundere.

Teaching experience

Student teachers follow a fixed program of classroom teaching practice for 6 months during the last 6 months of the training. Once in colleges, they are being assigned to a teacher trainer, who follows-up the student teacher and after two weeks of observing the teacher teaching in class, the student teacher takes over the teaching and the teacher observes for the next 5 months. Corrections are made after every lesson. At the end of the experience, an inspection team moves round the schools to evaluate the student teachers. The completion from a teacher training institution depends on the practical experience from classroom inspection. Upon graduation, the teachers are, however, sent to public schools. Private schools employ teachers with at least a bachelor degree, some teachers in their first year with no experience.

Most teachers gain experience from in-service training which are usually organised in the form of impregnation seminars. Some seminars last for at least 3 days to a week to acquaint teachers with curriculum and pedagogic principles before the beginning of the school year. These seminars are organised by the ministry of secondary education, through the various

divisional delegation involving both public and private schools. Also, experience is gained from the setting and marking of national examinations. Most teachers in private secondary schools are not from professional training institutions. They have little or no experience of teaching yet are employed to teach students. Most often teaching experience is demanded for employment. Teachers are expected to give feedback to students in the form of oral or mostly written on their scripts and it is usually followed by remediation lessons. The students that are below average do remedial classes to meet up with the outstanding students. This is usually done in the same classroom where the 'smart' students are grouped in one section of the class and given reinforcement work, while the slow learners are doing remedial lessons. The academic year ends with the writing of the official examinations. The General Certificate of Education (GCE), which is the national examination of Cameroon is written at the end of the academic year. Teachers qualify for marking after 3 years of teaching. The teachers manifest an interest by applying for marking to the GCE board. After the selection process, the list is published and teachers are called upon to set question and prepare marking guides before the exercise begins, the correction of the examination is a whole lot of experience that teachers leave the marking centre different from when they went in.

Situation of Class Size in Cameroon

Class size and class organization are issues that are often debated in relation to education quality. Average class sizes differ from pupil-teacher ratios: while the pupil-teacher ratio is a global measure of the teaching resources available in schools, average class sizes reflect the actual number of pupils taught by a teacher at a given time. Pupil-teacher ratios are generally lower than average class sizes as teachers typically have additional non-teaching duties. The class sizes are related to the classroom working conditions of teachers. It is generally recognized that larger classes result in lower educational achievements, especially in the early years of schooling (Glass et al., 1982). Large classes or multi-grade classes can be difficult for teachers to manage, may result in the adoption of less effective methods of teaching, and often limit the amount of individual attention and guidance students receive.

According to Ronald (2001), class size refers to the actual number of learners taught by a teacher at a particular time. This number of students could be large or small. Tambo (1989) defines class size as the number of students each teacher is officially assigned to teach. In Cameroon, the allowable number of students per class may be more due to some factors, as number of students attending school, inadequate infrastructures, among others). Before the

advent of the Corona Virus, plethoric classes were those of more than the official number allowed per class (60:1), Tambo (1989). Class size in Cameroon is a major problem in our educational system, especially in urban areas. During the 70's, however, the school attendance rate was very low and class size was not much a problem. With the encouragement of education stakeholders and the government of Cameroon, many more children go to school today, and with the increasing rate of urbanization, most Cameroonian classes have plethoric class sizes. In the present disposition of the corona virus pandemic, the government prescribed measures to fight against the pandemic. Institution heads were first told to organise classes of 24 pupils, making it possible to respect social distancing. However, as secondary schools in the major towns and cities cannot limit class sizes to 24 pupils due to lack of classrooms, some would have needed an extra 40 to 50 classrooms to do so, the public authorities then raised this number to 50 students per class and one student per bench.

Teacher motivation

It is generally assumed that motivation influences people's attitude and performance at work. Teacher motivation is directly linked to the instructors' desire to take part in the pedagogical process and interest in sharing their knowledge with the students. It determines their involvement or non-involvement in the teaching activities. Teachers put educational philosophy and objective into their knowledge they transfer to their students. Teachers are the most important factor in a generation's education process, therefore, imperative that they perform to the best of their abilities in the educational process. Every country's authorities pay attention to the factors that affect teachers' performance, especially the aspect of assessment given that it is the only way we can know what the students know. Teachers' motivation is influenced by a myriad of factors, including compensation, success in the classroom, their dedication to the profession, the training they receive and the prospect of promotion and career advancement (Amos, I et al,2015).

Maslow's (1943) hierarchy of needs proposes that individuals must fulfill their lower-order needs (basic needs such as water and housing, safety, belonging, and esteem) before being motivated to fulfill the higher-order need for self-actualization. In the context of teaching, self-actualization can be understood as personal achievement, a key component of teacher motivation. As basic needs often go neglected in the developing world, Maslow's theory is pertinent to an investigation of teacher motivation in developing countries. While the fulfillment of basic needs is important to lay the foundation for teachers to desire to improve their professional behavior and personal achievement, other theories indicate that satisfaction

of basic needs functions as a mere extrinsic, or external, incentive. According to Benabou and Tirole (2000), extrinsic incentives are only weak re-enforcers of motivation in the short run and negative re-enforcers in the long run. In terms of work motivation, Herzberg (1966 cited in Chapman, 2003), finds that achievement, recognition, the work itself, responsibility and advancement are more effective long-run motivators than interpersonal relations, working conditions, and pay. For teachers, Chapman (2003), notes that incentives are related to teacher job satisfaction, but not to teacher classroom practices. Thus, it appears that while teachers need housing, food, safety, belonging, etc. in order to be professionally motivated, the provision of these needs past a baseline requirement is not a sustainable driver of teacher motivation. Instead, teachers need supports that encourage their intrinsic, or internal, motivation; such as achievement, recognition, and career development. The relationship between, and relative effectiveness of, extrinsic versus intrinsic incentives is an important issue for teacher motivation in the developing world, where material resources to motivate teachers through extrinsic means are often very scarce. In Cameroon, like other developing nations the love for the job is fast dying out as the salaries, incentives, and work conditions are discouraging. Apart from teachers recruited by the state a bulk of those who teach especially in private schools are lowly paid, working with no job security and very low wages. The teaching job is seen as a way to enter into the civil service and then look for a way out. That's how hundreds of teachers leave the teaching field due to low motivation. The standards for the construction of schools, teacher satisfaction and teacher remuneration is not respected by all. More so, the private teacher is at the begging point, working in such conditions can't keep an employee motivated to work.

Teacher Work Environment

The major pillars in any educational institution are the teachers. Great school staff makes for great results, which improves the school's chances of attracting talented teachers and students. However, most schools and colleges take their talented staff for granted, expecting them to perform in an environment that doesn't facilitate their best productivity.

Teachers' work space is commonly known as staff room and its design is one of the most important, yet neglected areas in the whole school. When it comes to priority for maintenance and refurbishment, teacher's offices and staff zones generally fall to the bottom of the pile, which seems counter-intuitive. There is no legislature fixing the design for teacher office space in Cameroon, meanwhile, if you want teachers to do their best work, they need to have

an environment that helps them to do this. The rigors of the school day are hard work for teachers, and indeed non-teaching staff. Giving your staff a place to relax and re-charge helps them to give their best when they are at the front of the class. Staff room design needs to accommodate a wide range of activities, yet with careful space planning this is achievable. The staff room has to be a communal space. An area where teachers can pick up a coffee, swap stories with colleagues and build relationships with the staff around them. All government own schools have basic staff room facilities, such as tables and chairs, toilets attached and cleaners to take care of the rooms. They are, however, very small for the increasing number of teachers in most urban schools. The different departments do not have offices for departmental meetings. Teachers use staff rooms for marking student's work, perhaps communicating with parents or planning the next lesson. Adequate storage is also being required in a staff room. A place where staff can safely keep their belongings, and access them when needed.

The working environment of teachers is extremely important to them and, ultimately, to their students; teachers are more satisfied and intend to stay longer in schools with a positive work environment, regardless of the student demographic characteristics of the school (Papay et al, 2012). Clean and well-maintained facilities and access to new instructional technology are not the most important aspects of the work environment for teachers (Hassanain et Ali, 2015). The physical surroundings, such as safety and comfort, as well as economic variables like compensation and job security, were all important aspects of a teacher's employment; it also incorporates assignment structures such as workload and supervision, as well as cultural and social variables such as organizational culture strength and co-worker and student qualities (Wilson et al, 2020). The work environment of teachers is vital; after all, the working environment of teachers is the learning condition of students, and the unproblematic environment in which to teach is also the comfortable environment in which to learn.

Classroom assessment

The philosophy of Competencies-Based Education remains the foundation of the Cameroonian curriculum. Student assessment is an integral part of teaching and learning. Teachers play a major role in this process, for this reason, their competencies and knowledge skills in classroom assessment practices are critical. Teachers are considered as a cornerstone for bringing change and preparing students for future endeavours. It is very essential to understand their teaching practices particularly how they assess and evaluate student learning

outcomes. For this reason, (Reynolds, Livingston, & Willson, 2009; McMillan, 2008; Nitko, 2001) maintain the common argument that classroom assessment plays an important role in schools and as teachers spend a lot of their time engaged in assessment related activities, they should master some basic assessment competencies. Teachers struggle as they try to improve their assessment practices and make assessment decisions, mainly because the whole process is characterized by the tension between teachers' beliefs about assessments and the values they bring along, as well as other external forces that they have to consider along the way (McMillan, 2003). Teachers often have major constraints as they attempt to achieve their aspirations across a wide range of teaching practices. Teachers use some level of expertise to work within the challenging environment of classrooms for purposes of bringing their teaching and assessment practices in line with their values.

The competency-based method of teaching, meant to develop critical thinking skills, was adopted in 2010. Seminars to train teachers to embrace the new paradigm shift were held, though mostly limited to urban areas therefore the traditional methods of teaching are still very present. To improve its implementation, seminars were held and teachers were trained to assess students on the competencies they expect from them and the skills were meant to be life-long and transferable. This amendment of the CBA stipulates policy on curriculum and assessment in the schooling sector. The CBA requires teachers to alter their assessment practices in profound and significant ways. Teachers are expected to use both formal and informal assessments to ensure that assessment is accurate, objective and fair; to use clearly defined learning outcomes and assessment standards; to plan for formal assessment tasks; and to use a variety of appropriate assessment strategies. Furthermore, teachers are required to use continuous assessment and to identify, assess and provide learning support to learners who might experience barriers to learning and development. Continuous assessment also allows teachers to identify such learners early in the year. This assessment policy departed radically from the previous assessment regime that emphasized and relied heavily on summative tests and examinations as a final judgment of learner performance.

Assessment in Cameroon today is done following a Sequential System of Assessment (SSA). There is a ministerial circular drawing up the schedule for tests, however, no other document bearing instructions for implementation was provided. At the introduction of the Sequential System of Assessment (SSA) in Secondary Schools in Cameroon, it was presumed it would increase commitment by school administrators and teachers to the use of students' tests data

in order to improve student learning and their own accountability for student learning. The 36 weeks usually allocated for instruction in an academic year is divided into six (6) sequences. Each sequence is supposed to have a week for testing only. Throughout this time, teachers are obliged to administer test, mark and guarantee that the scores are forwarded to the School Principal who subsequently transmits a report to the Divisional Delegate for Secondary Education within a stipulated time frame. A class council is supposed to assess students' progress. As a form of Continuous Assessment (CA), the SSA practice was introduced with the hope that it was going to enhance classroom instruction and student learning (Agborbechem & Frinwie, 2013). Monono & Foncha (2014), however, argue that when continuous assessment timetables are imposed on teachers who are obliged to forward students' scores within a given period rather than allowing teachers to administer test at the period, they consider most appropriate in the course of the instruction, the merits of CA become disputed. Bloom suggested that, rather than waiting to assess students at the end of the unit, (common practice at the time) teachers use assessment "as an integral part of the instructional process to identify individual learning difficulties and prescribe remediation procedures" (Foncha e al, 2010).

Duncan & Noonan (2007) argue for the importance of knowing how teachers' assessment strategies are influenced by types of classroom learning conditions, such as, class size and resources). Teachers believe that traditional forms of assessment are more time efficient and have more value because they serve summative requirements and accountability demands (Hargreaves, Earl, & Schmidt, 2002; Mabry et al., 2003). There are worries that formative assessment demands too much class time to integrate and that it limits the amount of curriculum teachers can cover within their programme (Morgan & Watson, 2002). Carles (2005) noted that teachers believed formative assessment is good in theory, but that it is not practical to implement especially within a context of competing curriculum demands. Student assessment is an integral part of teaching and learning. Teachers play a major role in this process, for this reason, their competencies and knowledge skills in classroom assessment practices are critical. Teachers are considered a cornerstone for bringing change and preparing students for future endeavours.

It is very essential to understand their teaching practices particularly how they assess and evaluate student learning outcomes. For this reason, (Reynolds, Livingston, & Willson, 2009; McMillan, 2008; Nitko, 2001) maintain the common argument that classroom assessment

plays an important role in schools and as teachers spend a lot of their time engaged in assessment related activities, they should master some basic assessment competencies. Teachers struggle as they try to improve their assessment practices and make assessment decisions, mainly because the whole process is characterized by the tension between teachers' beliefs about assessments and the values they bring along, as well as other external forces that they have to consider along the way (McMillan, 2003). Teachers often have major constraints as they attempt to achieve their aspirations across a wide range of teaching practices. Teachers use some level of expertise to work within the challenging environment of classrooms for purposes of bringing their teaching and assessment practices in line with their values. For more than three decades, researchers have been conducting research meant to shed some light in the understanding of the nature and scope of teacher classroom assessment practices. There is evidence that teachers lack an adequate knowledge base regarding testing and measurement procedures.

In their study, Daniel and King (1998) acknowledged findings made by Schafer and Lissirz (1987) who more than a decade earlier hoped that teachers' knowledge of testing and measurement would improve. A decade later, Daniel and King (1998) found that teachers still lacked an adequate knowledge base regarding testing and measurement procedures. Another decade later researchers found that when evaluating students' academic learning, teachers failed to adhere to recommended classroom assessment practices (Campbell & Evans, 2000). Previous research does confirm that teachers' classroom assessment practices have been taken for granted. Educators place more focus on research meant to improve the use and quality of standardized examinations and have placed minimal attention on the quality of classroom assessments. "Measurement professionals are more interested on issues related to test development and the technical quality of standardized measures than in classroom assessment and grading practices" (Smith, 2003, p. 99).

This state of affairs leads to many arguments regarding how educators view students' assessment practices. For instance, Ohlsen (2007) states that "policymakers support the use of high-stakes testing as the measure of student and school achievement despite serious reservations on the part of the educational classroom assessment" (p.4). Barsdale-Ladd and Thomas (2000) conducted a study with in-service teachers and they identified some essential aspects of classroom assessment competencies that teachers should adopt as they assess students. They indicate that teachers should: (a) provide students with feedback for purposes

of improving students' learning, (b) take assessment as part of a student's work, (c) exercise some level of flexibility in assessment so as to ensure that assessment does not dominate the curriculum, (d) ensure that assessment informs instruction to improve teachers' instructional methods, and (e) use multiple assessment methods to evaluate students' learning. Vandeyar and Killen, (2003) argued that regardless of educational setting, high-quality assessment practices should satisfy essential principles such as validity, reliability, fairness, discrimination, and meaningfulness. For Vandeyar and Killen, if teachers have a clear understanding of these principles; they can have an informed framework of using assessment results to make better informed decisions from assessment results. When teachers misunderstand these principles, their assessment practices are more likely to generate worthless information.

1.2. Statement of the problem

Clear purpose, clear targets, sound design, effective communication, students' achievement, are some of the classroom assessment indicators from the literature. To optimize the potentials of assessment, conventional perceptions of its use need to change and the assessment tools themselves need to be designed to generate usable data for and relevant to all children (Care et al, 2017). Measurement professionals are more interested on issues related to test development and the technical quality of standardized measures than in classroom assessment and grading practices (Smith, 2003, p. 99). Grading and Ranking don't provide performance information and importantly tell neither students nor parents what a student has learned. Classroom evaluation practices generally encourage superficial and rote learning, concentrating on recall of isolated details, usually items of knowledge which pupils soon forget, Crooks, (1988) and Black, (1993b). Recently, stake holders have realized that assessment poses greater mental demands on learners, as they are required not only to have knowledge of the fields of content, but also to be able to understand, apply and demonstrate skills in their fields. Learning processes today are challenged much greater than in the past, this impact directly on assessment. There is paradigm shift of classroom assessment from the traditional paper and pencil test to include- peer review, portfolio, anecdotal records, and group work, among others. Assessment practices are frequently based on a normative paradigm where there is an expectation that a small number of students will achieve at the peak level, a large group on the average and a predetermined number will fail. It has been an important winnowing tool in situations in which the environment allows for only a limited

number of individuals to progress. The pass/fail approach can lead to a further marginalization of at-risk-children. Student achievement is often the indicator used to evaluate and hold teachers and schools accountable (Miller, Linn & Gronlund, 2012). Are teachers not trained enough to attain a level of competency in classroom assessment?

Clarke, (1996,328,343) argues that the success of any system of assessment can be judged by the modeling and monitoring of critical abilities through valued performance in real life. Chisholm, (1999,250), concurs that metric results are treated as a statement about how well or bad we are doing as a society. As a result of the sophistication of performance required of learners today, a corresponding increase in critical abilities, and with it a sophistication of assessment criteria is inevitable. Also, the grading function of assessment is over-emphasized and the learning functions under-emphasized. There is a tendency to use a normative rather than a criterion approach, which emphasizes competition between pupils rather than personal improvement of each. The evidence is that with such practices the effect of feedback is to teach the weaker students that they lack ability, so that they are de-motivated and lose confidence in their own capacity to learn.

Furthermore, there is little focus on such outcomes as speculation and critical reflection (Stiggins et al., 1989; Senk et al., 1997), and students focus on getting through the tasks and resist attempts to engage in risky cognitive activities (Duschl & Gitomer, 1997). Although teachers can predict the performance of their pupils on external tests, albeit tests reflecting low-level aims, their own assessments do not tell them what they need to know about their students' learning (Lorsbach et al., 1992; Rudman, 1987). Knowledge of teachers' ability to discriminate between good and poor assessment practices is needed to quantify teacher ability in terms of classroom assessment competence (Stiggins, 1991). Demonstration of skills today has become more complicated (NDE,1998). As performances can no longer be categorized sufficiently as right or wrong, what then is the influence of teachers' characteristics and school environment on the implementation of classroom assessment practices? What assessment instruments are used to evaluate teachers' assessment practices?

Classroom assessment practices being an integral part of teaching and learning and the gateway of judging what students have learned is the focus of this study.

1.3. Objectives of the Study

In other to investigate the aforementioned problems, the following objectives were set out;

1. To verify the influence of teachers' qualification on the implementation of classroom assessment practices
2. To investigate the impact of the teacher's teaching experience on the implementation of classroom assessment practices
3. To verify the influence of class size on the implementation of classroom assessment practices
4. To investigate the influence of teachers' motivation on the implementation of classroom assessment practices
5. To verify the influence of teachers' work environment on the implementation of classroom assessment practices

1.4. Research Questions

1.4.1. Main Questions

1. What relationship exists between teachers' characteristics and the implementation of classroom assessment practices in English secondary schools in Cameroon?
2. What is the relationship between school environment and the implementation of classroom assessment practices in English secondary schools in Cameroon?

1.4.2. Specific Questions

1. What relationships exist between teachers' qualification and the implementation of classroom assessment practices in English secondary schools in Cameroon?
2. What relationships exist between teaching experience and the implementation of classroom assessment practices in English secondary schools in Cameroon?
3. What relationships exist between class size and the implementation of classroom assessment practices in English secondary schools in Cameroon?

4. What relationships exist between teachers' motivation and the implementation of classroom assessment practices in English secondary schools in Cameroon?
5. What relationships exist between teachers' work environment and the implementation of classroom assessment practices in English secondary schools in Cameroon?

1.5. Hypothesis

1.5.1. Main Hypotheses

1. There is no significant relationship between teachers' characteristics and the implementation of classroom assessment practices in English secondary schools in Cameroon.
2. There is no significant relationship between school environment and the implementation of classroom assessment practices in English secondary schools in Cameroon.

1.5.2. Specific Hypotheses

1. H1: There exist a significant relationship between teachers' qualification and the implementation of classroom assessment practices in English secondary schools in Cameroon;

Ho: There exist no significant relationship between teachers' qualification and the implementation of classroom assessment practices in English secondary schools in Cameroon;

2. H1: There exist a significant relationship between teachers' teaching experience and the implementation of classroom assessment practices in English secondary schools in Cameroon;

Ho: There exist no significant relationship between teachers' teaching experience and the implementation of classroom assessment practices in English secondary schools in Cameroon;

3. H1: There exist a significant relationship between class size and the implementation of classroom assessment practices in English secondary schools in Cameroon;

Ho: There exist NO significant relationship between class size and the implementation of classroom assessment practices in English secondary schools in Cameroon;

4. H1: There is a significant relationship between teachers' motivation and the implementation of classroom assessment practices in English secondary schools in Cameroon;

Ho: There is NO significant relationship between teachers' motivation and the implementation of classroom assessment practices in English secondary schools in Cameroon.

1.6. Theoretical Framework

At this age of accountability, it is acknowledged that assessment is a powerful lever that can either boost or undermine students' learning. This study investigated the influence of teachers' characteristics and school environment on the implementation of classroom assessment practices therefore, it is important to make explicit the basis on which the teachers' classroom assessment practices were interpreted.

1.6.1. Hargreaves, Earls and Schmidt Model

The study utilized the conceptual framework based on the model suggested by Hargreaves, Earl and Schmidt (2002). The model highlighted four perspectives – technological, cultural, political and postmodern, with the intention of accounting for teachers' assessment practices. This model was offered as an attempt to comprehend the factors that influence teachers' assessment practices. It scrutinized the how and why, and the commonness of use of classroom assessment tools, techniques and methods. The model was therefore based on the acknowledgement of the notion of assessment as reflective of values and epistemological beliefs about teaching and learning.

The suggested model consists of four perspectives that underpin teachers' assessment practices and beliefs. The first perspective emphasizes the technological aspects of applying classroom assessment (Hargreaves, Earl and Schmidt, 2002:81). It involves technical views of time allocation and management, organisational structure and the availability of resources. It also involves teachers' expertise in developing and conducting classroom assessment as

well as likely gaps between home and school expectations pertaining to classroom assessment. These technical aspects can hinder teachers' assessment practices.

The second perspective dwells on the cultural dimension, and refers to the interpretation and integration of assessment into the schools' social and cultural context. This perspective views assessment as a continuous activity and a multifaceted process integrated with learning, with learners actively participating in the different stages of the assessment process (Hargreaves, Earl and Schmidt, 2002:81). This view takes into consideration partnerships among various stakeholders: learners, teachers, parents, community members and administrators. Teachers who support these principles appear to be more dedicated to the use of different assessment tools, techniques and methods.

The third perspective highlights the political dimension, which centres on "the exercise and negation of power, authority and competing interests among groups" (Hargreaves, Earl and Schmidt, 2002:81). This view is associated with the pressure of external evaluation on classroom-based assessment; top-down inspection and supervision performed by standardised tests; as well as bureaucratic meddling or institutional preferences and requisitions. Teachers who are powerfully influenced by the political aspect are likely to conduct classroom assessment according to external, standardised existing models.

The last perspective is post-modern, viewing assessment from the environment of ambiguity that distinguishes the current period in history, thus critically questioning the credibility and trustworthiness of assessment practices and beliefs (Hargreaves, Earl and Schmidt, 2002:81). Such a critical position may lead teachers to challenge or dispute the implementation of assessment methods, tools and techniques in their classrooms.

The model therefore takes a wide perspective in relation to teachers' assessment practices, aiming at both the micro and the macro contexts. It thus acknowledges a multifaceted analysis of the issues underpinning classroom assessment from a critical standpoint, and incorporating related social, political and philosophical factors (Hargreaves, Earl and Schmidt, 2002). Simultaneously, it includes issues at a local level, such as availability of resources and partnership among the various stakeholders in the school context. As highlighted above, and relating to an argument emphasized by Davison (2007), using different forms of assessment is not merely a technical innovation but an intensely conceptual

one. Because the Hargreaves (2002) model is geared towards examining innovations in education, it is appropriate for the purpose of examining such a shift in various frameworks.

The model is research based; as highlighted in the research conducted among twenty-nine Canadian teachers teaching different learning areas in grades 7-8 (Hargreaves, Earl and Schmidt, 2002:81). They used teachers from a familiar background and committed to using various forms of classroom assessment. They also used a quantitative method of data collection and confirmed with the existence of the four perspectives (Hargreaves, Earl and Schmidt, 2002). Nevertheless, questions can be posed as to the applicability of the model in a more varied teacher sample, that is, teachers who vary in their familiarity with and support of classroom assessment. In addition, the research strategy utilized in the research mentioned above employed a quantitative data collection method.

A point of consideration is whether similar results, namely the existence of the four perspectives as outlined in the model, would emerge on the basis of a qualitative type of data collection and analysis. Additionally, another question can be whether the results mentioned in the above study would emerge in a different context/culture with teachers from a specific learning area. My study therefore undertook to use the Hargreaves (2001) model in a different setting; to understand the challenges affecting teachers' classroom assessment practices, how they deal with these challenges and also how the challenges influence effective teaching and learning.

Special significance has been placed on classroom assessment in educational contexts and this has foregrounded formal acknowledgement of the primary role that teachers play in the assessment process and therefore the discussion of teachers' assessment practices, perceptions and expert knowledge in the area of assessment (Inbar-Lourie and Donitsa-Schmidt, 2009).

Consequently, the primary aim of this study is to shed light on the factors which influence teachers' assessment practices, whether they emerge from the teachers' local context, from their pedagogical belief systems, or whether they are affected by forces and considerations external to the school setting (Neesom, 2000; Davison, 2004). This conversation is specifically relevant in systems which have been made known and are advancing a classroom assessment paradigm while concurrently embracing top-down standardised testing, culminating in tension between formative assessment and high-stakes external examination

(Brindley, 2007). Similarly, Leung and Rea-Dickens' (2007) analysis of the rhetoric of policy documents attests to the gap between the official assessment policy within the National Curriculum in the United Kingdom, which dwells upon formative teacher assessment, and the dialogue within policy documentation which shows contempt for basic issues underpinning formative assessment.

Despite the growing research interest in teacher assessment, not enough is known about the influence of teachers' characteristics and school environment, such as; teacher qualification, teaching experience, class size, teacher motivation and teacher work environment, on the implementation of classroom assessment practices and the perceptions, opinions and ideas which motivate their continuous classroom assessment practices.

Assessment plays a critical role in teaching and learning (Murray, 2006; Stiggins, 2008). According to Danielson (2008) and Vadar (2010), assessment is crucial for education policy makers and practitioners involved both in accountability, implying how well the learners have learned, and instruction, that is, how to promote higher levels of learning.

1.6.2. Bernstein and Shulman theories on teacher training

Bernstein's theory holds that there are elaborated and restricted codes within the broader category of language codes. The construct of restricted and elaborated codes was introduced by Bernstein in the 1960s. As an educator, he was interested in accounting for the relatively poor performance of working-class students in language-based subjects, when they were achieving scores as high as their middle-class counterparts on mathematical topics. He asserted a direct relationship between societal class and language. According to Sadovnik, (2001), Bernstein went further and used code theory to investigate schools and pedagogical practices: which included what knowledge (curriculum) to teach to learners, how it is taught (transmission), and how knowledge is realised (evaluation/performance)

Bernstein viewed pedagogic practices in two forms; visible/explicit and invisible/implicit and related to these are the ordering of teaching curriculum either sequentially or in parallel and the pacing of the delivery. Bernstein (2000) saw recontextualisation process as consisting of two parts: the curriculum (i.e. the 'what') and the pedagogical approach, which relates to theory of instruction (i.e. the 'how'). Thus, recontextualisation straddles two parts of his pedagogic practices' acquisition/curriculum and transmission. He defined recontextualising principle as one "which selectively appropriated, relocates, refocuses, and

relates other discourses to constitute its own order and orderings” (Bernstein 1990 pp 184). “The recontextualising rules regulate not only selection, sequence, pace, and relations with other subjects, but also the theory of instruction from which the transmission rules are derived” (Bernstein 1990 pp 185). This is the second stage of his pedagogic practices. In terms of teacher training courses, recontextualization process has to do with ‘how’ parts of the subject specifications and generic teaching standards are selected, taught in terms of order, required time to cover the contents and related to each other together with the way in which the course is delivered.

On the other hand, Shulman (1987) believed that the study of signature pedagogies is a way of systematically following teachers in the learning process and using the feedback to redesign teacher-education programs and professional development. He concentrated on the types of knowledge that are required in teacher training and the processes trainees needed to go through to becoming a teacher which he calls ‘Processes of Pedagogical Reasoning and Action’. A model of pedagogical reasoning and action advocated by Shulman (1987) had six stages namely: comprehension, transformation, instruction, evaluation, reflection and new comprehensions. Comprehension stage requires understanding of the subject area like numeracy but also values, characteristics, needs and learning interests of students (trainees and their learners). Shulman suggested that in order for a trainee to teach, he needed to transform his understanding or comprehension of the subject matter. Thus, transformation requires some ordering, which includes preparation of subject materials, their understanding and critical interpretation, representation that requires ways in which ideas and concepts of the subject materials can be conveyed to learners using examples, metaphors, experiments and demonstrations, and instructional selections, where teaching and learning styles like lecture, group learning and project work can be applied in a learning environment.

The third pedagogical process from Shulman’s model is instruction. It requires the most important of teaching acts like organising and managing the classroom, providing succinct explanations, handing out and assessing work, interacting effectively with learners via questions and answers, praise and criticism. Next comes evaluation where understanding or not by learners is monitored in both formal and informal ways. Reflection is used by a teacher to refer back to his teaching where, what has worked and what has not, and to rethink how the lesson has gone in relation to achieving its aims. Finally, new comprehension

is achieved after going through the previous five stages where documentation, analysis and discussion have been carried out. Shulman suggested that the five stages need not be linear nor need all five stages be experienced. However, the five stages provide, in primary school teaching, a comprehensive structure for a trainee teacher to follow.

The conceptual frameworks of Bernstein and Shulman with regard to transmission and transformation respectively, are particularly useful in enabling teacher trainers to raise teacher-training standards by emphasising the importance of linking teaching skills to subject knowledge.

The pedagogical stages of Shulman's model of pedagogical reasoning are particularly useful in understanding a trainee's cognitive processes to becoming a teacher.

Volante and Fazio (2007) argued that teachers' proficiency in assessment and evaluation practices should be viewed as a requisite skill for improving the quality of teaching and learning, particularly in this era where schools are held accountable for the quality of students' learning. Even with this expectation in mind, problems associated with teachers' classroom assessment practices continue to prevail in schools from the past decades till now. Research shows that teachers still feel dissatisfied by the type of assessment training they receive during their pre-service training. For instance, when teachers were asked to give their opinion about the assessment training they receive, many indicated that most of the time the assessment training they received focused on methods and techniques relevant to large scale test administration and score interpretations, and did not expose them to assessment techniques needed in classroom settings (Stiggings & Bridgeford, 1985).

Jin (2010) conducted a survey with college professors in China to investigate their training in tertiary level of foreign language. The study was meant to give an overview of the current situation regarding instructors' teaching content, methodology, materials used and students' perceptions of the courses. The main focus of the study was on language testing and assessment courses. Results of this study showed that instructors adequately covered essential aspects of teaching theory and practice of language testing, but educational measurement and students' classroom assessment practices received significantly less attention in the whole process.

Even though there is evidence that teachers' assessment training is not given the attention it deserves, other research showed that teachers do not necessarily implement what they learned in measurement classes, making it difficult to know whether improved training on measurement can be of any value to how teachers use measurement techniques that they learned during training. A good example is provided in a study conducted with pre-service teachers who had just completed a course in measurement (Campbell & Evans, 2000). Pre-service teachers were attached to schools to see how they implement what they have just learned in measurement classes. The main assumption was that teachers who had just completed a measurement course would display some comparable knowledge of recommended measurement practices due to their recent training.

To the researcher's dismay, such an assumption was not met as the teachers did not follow many of the assessment practices recommended in their coursework, making it difficult to know how best teachers could be made to appreciate the value of adhering to required assessment principles when they assess students. Incorporating the recommendations of assessment training into classroom practices may mean more than merely possessing essential knowledge. Given their successful completion of a required course in educational assessment, along with extensive practice constructing and critiquing assessment methods, the pre-service teachers' failure to attend to issues of consistent scoring and content-related evidence of validity to assess students' learning does not seem to be a result of a lack of knowledge (Campbell & Evans, 2000). The new belief is to acknowledge the critical importance of classroom assessment and provide teachers with the tools they need to build classroom environments that promote learning through continuous student-involved assessment, record-keeping, and communication (Stiggings, 2004).

1.6.3. David Kolb's theory of teaching experience

David Kolb first outlined his theory of learning styles in 1984. He believed that our individual learning styles emerge due to our genetics, life experiences, and the demands of our current environment. Kolb states that learning involves the acquisition of abstract concepts that can be applied flexibly in a range of situations. "Learning is the process in which, knowledge is created through the transformation of experience" (Kolb, 1984, p. 38). According to Kolb, effective learning can only take place when an individual completes a cycle of the four stages: concrete experience, reflective observation, abstract

conceptualization and active experimentation. Concrete experience: ... According to Kolb's theory, a person cannot learn by simply observing or reading.

According to Healey, 2000, the works of the organisational psychologist David Kolb have influenced the work of teachers and trainers. Kolb's model highlights the importance of the reflection component in the learning cycle. Reflection allows the student to process what just happened during the experience. In the Reflective Observation stage students can both recount and evaluate their experience.

Experience plays an important role in the life of a classroom therefore teachers have to keep learning to gain the experience they need to teach and keep the classroom assessment practices active. According to Kolb, individuals learn better when subject matter is presented in a way that is consistent with their preferred learning style. This theory insists that teachers should encourage students to engage in the four stages of learning cycle while in training so that the experience they gain will help them in the practice of their profession.

1.6.4. Theory of class size

Edward Lazear (1999) lays out an insightful economic theory of class size. He argues that students who attend a smaller class learn more because they experience fewer student disruptions during class time, on average. Such a result follows naturally if the probability of a child disrupting a class is independent across children. Lazear, plausibly assumes that disruptions require teachers to suspend teaching, creating a “negative externality” that reduces the amount of learning for everyone in the class. There may be other benefits to smaller classes as well. For example, it is possible that students who spend time in small classes learn to behave better with closer supervision, leading to a reduced propensity to disrupt subsequent classes.

Lazear's model probably captures an important feature of class size, and yields a specific functional form for the education production function. Another implication of Lazear's model is that the “optimal” class size is larger for groups of students who are well behaved, because these students are less likely to disrupt the class and therefore benefit less from a class size reduction than more disruptive students. Schools therefore have an incentive to assign weaker, more disruptive students to smaller classes. Compensatory education programs that provide more resources to lower-achieving schools could also be viewed as targeting resources to weaker students.

If schools voluntarily assign weaker students to smaller classes (as predicted by Lazear) or if compensatory funding schemes cause weaker students to have smaller classes, a spurious negative association between smaller classes and student achievement would be created. This phenomenon could explain why studies who avoid this problem by focusing on changes in class size that are not chosen by school administrators but are imposed from outside for reasons unrelated to individual students, such as in Angrist and Lavy's (1999) clever analysis of Israel's Maimonides law, as well as the STAR experiment, tend to find that smaller classes have a beneficial effect on student achievement. For educational policy, the relevant parameter is the potential gain in achievement from exogenous reductions in class size from current levels, not the relationship estimated from observed variations in class sizes voluntarily chosen by schools. One final aspect of Lazear's model is worth emphasizing. If schools behave optimally, then they will reduce class size to the point that the benefit of further reductions in class size just equals the cost. This implication provides a plausible economic null hypothesis. If we are starting from the optimal level, the costs and benefits of changes in class size should be roughly equivalent.

As Lazear (1999) writes, "The point is that even if class size effects are potentially important, in equilibrium, marginal changes in class size may have small effects on observed educational output. If large gains were available from lowering class size, then those changes would have been made." Unless large opportunities for social gain are left unexploited by local school districts, we would expect the benefits of further reductions in class size to equal their costs.

1.6.5. Herzberg Two Factor Theory of Motivation

This theory, also called the Motivation-Hygiene Theory or the dual-factor theory, was penned by Frederick Herzberg in 1959. This American psychologist, who was very interested in people's motivation and job satisfaction, came up with the theory.

The two-factor theory states that there are certain factors in the workplace that cause job satisfaction while a separate set of factors cause dissatisfaction, all of which act independently of each other.

He conducted his research by asking a group of people about their good and bad experiences at work. He was surprised that the group answered questions about their good experiences very differently from the ones about their bad experiences.

Based on this, he developed the theory that people's job satisfaction depends on two kinds of factors; Factors for satisfaction and factors for dissatisfaction. He called them motivators / satisfiers and hygiene factors / dis-satisfiers, respectively Performance, recognition, job status, responsibility and opportunities for growth all fall under motivators/ satisfiers. Hygiene factors (dis-satisfiers) are about salary, secondary working conditions, the relationship with colleagues, physical work place and the relationship between supervisor and employee.

In his theory, Herzberg claims these factors function on the same plane. In other words, satisfaction and dissatisfaction aren't polar opposites. Taking away an employee's dissatisfaction, for example by offering a higher salary doesn't necessarily mean the employee will then be satisfied. The employee is just no longer dissatisfied. Four different combinations can exist at work:

- High hygiene and high motivation: This is the ideal situation. Employees are very motivated and barely have any complaints;
- High hygiene and low motivation: Employees have few complaints, but they're not really motivated, they see their work simply as a pay check;
- Low hygiene and high motivation: Employees are motivated, their job is challenging, but they have complaints about salary or work conditions;
- Low hygiene and low motivation: This is the worst possible situation, when employees are not motivated and have a lot of complaints.

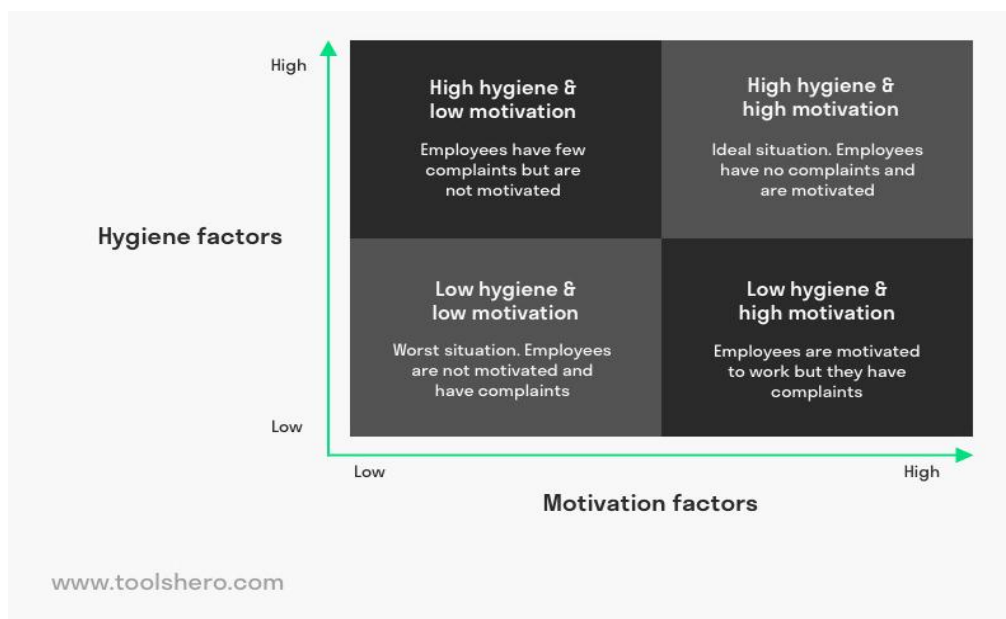


Figure 1: Illustration of the Two Factor Theory in Practice

Adjusting the hygiene factors, also called the **KITA** (Kick in the Ass) factors by Herzberg, often have a short-term effect that doesn't last very long. Changing the motivation factors on the other hand often have a more lasting, long-term effect on employee performance.

Organisations and their managers want teams with the best possible performance. But how do you motivate that team? There's not much point in motivating employees if the hygiene factors aren't taken care of. Motivating people really works when the things that bother them, that is, the things they complain about disappear.

To take away the dissatisfaction, it is important to figure out all the important factors first. What are the complaints about, what's going on, how do the employees interact with each other?

Generally speaking, the following aspects are important:

- Work on the bureaucracy within the organisation
- Make sure there's supportive and effective supervision
- Create a work environment where all employees are respected
- Pay an honest salary
- Make sure all employees do worthwhile work to build up the status of their functions
- Give job guarantees

When the dissatisfaction is taken away, the organisation can focus on motivating its employees effectively. Organisations are prone to take Kick in The Ass measures in the short term, because they don't affect the organisational structure that much. A higher salary, better work conditions etc. Measures for motivation require bigger investments and changes to the organisational culture.

The Herzberg Two Factor Theory is a theory about motivation of employees, such as teachers. This theory assumes on the one hand, that employees can be dissatisfied with their jobs. This often has something to do with so-called hygiene factors, such as salary and work conditions. On the other hand, employees' satisfaction has to do with so-called motivation factors. These factors have to do with development opportunities, responsibility and appreciation. Teachers' satisfaction is directly proportional to productivity. Most practicing teachers believe that their job satisfaction is proportional to performance. This theory will enable us to clarify this doubt and brings an understanding of teachers' motivation

characteristics. This theory is also important in this study as it will help us bring out possible solutions to school owners, such as, governments, international organizations, denominational and private owners, to create conditions for good performance, appreciating your employees' contributions, tailoring the work to your employees' talents and abilities, giving each team as much responsibility as possible, offering opportunities for growth within their career, in-service training and development opportunities. Behaviorism also makes important assumptions about motivation to learn. It assumes that individuals are externally motivated by the pursuit of rewards and avoidance of punishments.

In particular, Skinner's (1954) interpretation of how reinforcement should be used to structure learning environments had far-reaching effects on education. As expressed in the earlier quotation, it was Skinner's idea that to keep the learner motivated, instruction should be staged to ensure as much success as possible with little or no negative feedback. It is this motivational purpose as much as the componential analysis of tasks that led to the idea of little steps. In *Individually Prescribed Instruction* (Education U.S.A., 1968), for example, lessons were designed around skills that the average student could master in a single class period.

1.6.6. Title's Theory of Classroom Assessment

Teacher beliefs can be conceptualized within the framework and theory of Title (1994) which she developed to guide assessment practices in classrooms. This theory emphasizes the following dimensions about classroom assessment practices: (a) Interpretation and knowledge, beliefs, intents, and actions, and (b) Assessment characteristics, embeddedness in practice, format and mode, scoring, evaluation, preparation and feedback. Title (1994) also points out that there are two things essential to know about assessment knowledge related to teaching, and knowledge about assessment process. This study focused on the need to help teachers learn to improve the way they evaluate students' mathematics learning. The major objective was to develop assessment approaches that more accurately reflect teachers' own goals, the goals of the NCTM Curriculum and Evaluation Standards (1989), and other national recommendations.

A more indirect, but important objective of the project was to study the impact of alternative assessment on classroom teaching practice. The goal was to bring instruction and assessment into closer alignment and interaction. This was made possible by helping teachers to develop the ability to assess the effects of teaching approaches that were designed to involve students

in problem solving and thinking. Teachers were encouraged to broaden their repertoire of teaching strategies and to use alternative assessment strategies as a part of implementing these strategies.

Work on developing alternative assessment plans contributed to bringing teaching and testing into agreement. Instead of being limited by traditional tests, teachers developed plans for assessment that fit within their own styles and approaches. Teachers' self-knowledge of classroom assessment practices plays a major role in this study as it covers a wide range of issues and teachers' belief systems. For instance, teachers may have construed meanings about professional expectations, standards, values, and their personal effectiveness as well as construed beliefs about assessment.

Furthermore, teacher belief systems were found to be integral part of informing their general teaching practices. Teachers are likely to hold beliefs about assessment on students before assessment (provide a focus of learning), knowledge about assessment effects on students during assessments (provide a sense of accomplishment, challenge, failure, or inadequacy), and knowledge about assessment effects on students after assessments (as fair, meaningful, useful providing information for continuing development or lack of it). Teachers may also have beliefs about the effects of assessment on teachers themselves, such as requiring instructions on particular topics or problems or providing or not providing useful information for instruction (Title, 1994, p. 152).

All these dimensions informed this study. The theory of teacher knowledge and beliefs, and assessment characteristics play a major role in developing the framework of this study. "Teacher beliefs" have been found to be pivotal in constructing their experiences. Through their beliefs, teachers develop some theories about their roles and responsibilities, such as what they teach, and how and what they use to assess student learning outcomes. Understanding teachers' beliefs and perceptions about their classroom assessment practices is very important as it can open avenues for addressing the needs that teachers have as they wrestle with their day-to-day classroom assessment practices. The new demands in education reform have over the years put more pressure on teachers' classroom practices. Most of the teachers continue to struggle and are reluctant to accept the new policies on the basis that they conflict with their values, assumptions and beliefs.

As Vandeyar (2005) opines the source of such conflict stems from the fact that the new outcomes-based assessment policy represents a radical departure from the philosophy of assessment and its role in relation to learning. There is a shift from an exclusively norm referenced summative form of assessment in a content-based education system to criterion-referenced formative assessment. Based on these perspectives Vandeyar (2005) conducted a study with a sample of South African teachers to establish how they cope with conflicting demands on their assessment practices, values, and beliefs about student assessment. What came out in this study was that teachers continue to give attention to their beliefs and personal interests, regardless of the professional requirement to adopt changes in assessment policy meant to serve the interests of students.

1.6.7. Teacher Change Model

The model was developed by Guskey in 1986. Support for this new model of teacher change comes from a variety of sources. For example, recent ethnographic studies show that new ideas and principles about teaching are believed to be true by teachers only "when they give rise to actions that 'work'" (Bolster, 1983, p. 298). This research indicates that experienced teachers seldom become committed to a new program or innovation until they have seen that the new practices work well in their classrooms with their students. Guskey's model of teacher change considered that sustainable change in teacher practices only occurs after teachers' beliefs and attitudes have changed, but proposed that these changed as a result of seeing improvements in student learning outcomes that resulted from changes in teaching practices. The model portrays the temporal sequence of events from professional development experiences to enduring change in teacher's attitudes and perception.

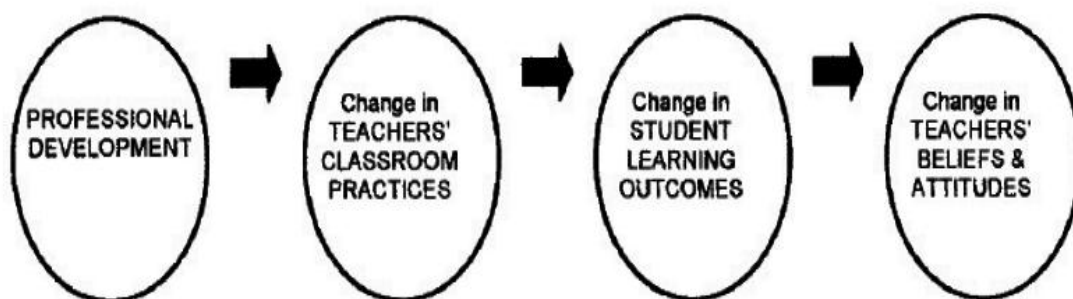


Figure 2: Guskey's Model of Teacher Change.

When planning and implementing effective staff development programs, it should be noted that:

1. Change is a slow, difficult, and gradual process for teachers. Although teachers generally want to do all they can to improve student learning, most oppose innovations that require radical alterations in their instructional procedures. The likelihood of their implementing a new program or innovation depends largely on their judgment of the magnitude of the required change. Programs or innovations that are dramatically different from current practices or that require teachers to make major revisions in the ways they presently teach are unlikely to be implemented well, if at all (Doyle and Ponder, 1977). To be successful, staff development must clearly illustrate how the new practices can be implemented without too much disruption or extra work (Sparks, 1983). Changes required of teachers should be organized and presented in small, incremental steps, and they should be described clearly and explicitly with emphasis on efficiency and practicality. Furthermore, it is best to begin with changes that are relatively modest but that can result in demonstrable student improvements in a fairly short period of time.

2. Teachers need to receive regular feedback on student learning outcomes. Practices that are new and unfamiliar will be readily abandoned unless evidence of their positive effects can be seen. Therefore, procedures by which teachers can receive evidence of their efforts must be planned. In programs involving the implementation of mastery learning, teachers receive feedback through the regular administration of “formative tests” (Bloom, Madaus, and Hastings, 1981). These tests give students detailed information on their learning progress and, when paired with corrective activities, help students remedy their learning errors. But they also give teachers specific feedback on the effectiveness of their use of the mastery learning process by clearly illustrating improvements in student achievement. Formative tests can be used to guide instructional revisions. Guskey (1985), and Stallings (1980), found that providing teachers with regular and precise feedback on student involvement during class sessions can also be powerful in facilitating new instructional practices. Evidence on students’ feelings of confidence or self-worth can also serve this purpose (Dolan, 1980). Thus, it is critically important that change efforts include some procedure for giving teachers regular feedback on learning outcomes. When teachers see that a new program or innovation works well in their classrooms, change in their beliefs and attitudes can and will follow.

3. Continued support and follow-up are necessary after initial training. Few teachers can move from a staff development program directly into the classroom and begin implementing a new

program or innovation with success. In most cases, some time and experimentation are necessary for teachers to fit the new practices to their unique classroom conditions (Joyce and Showers, 1982). This fitting process is referred to as "mutual adaptation" (Berman and McLaughlin, 1978) and is essential for successful implementation. Support during this period of trial and experimentation is critical. Teachers need continuous guidance and direction in order to make adaptations while maintaining program fidelity. Furthermore, they need to know that assistance is readily available if problems or unexpected difficulties develop and that occasional failures are tolerable (Cogan, 1975). This crucial support for teachers can be offered in a variety of ways.

Joyce and Showers (1982) suggest using "coaching" to provide teachers with technical feedback, guide them in adapting new practices to the needs of their students, and help them analyse the effects on students. Coaching is personal, hands-on, in-classroom assistance that can be provided by administrators, curriculum supervisors, college professors, or fellow teachers. In addition, new programs and innovations have been found to be most successful when teachers have regular opportunities to meet to discuss their experiences in an atmosphere of collegiality and experimentation (Little, 1981). For most teachers, having a chance to share perspectives and seek solutions to common problems is extremely beneficial. In fact, what teachers like best about in-service workshops is the opportunity to share ideas with other teachers (Holly, 1982). Follow-up procedures incorporating coaching and collegial sharing may seem simplistic, particularly in light of the complex nature of the change process. Still, as the new model suggests, careful attention to these types of support is crucial.

1.7. Justification of the Study

Assessment is a critical factor in the teaching and learning process. Assessment is the most common form of educational measurement, consuming at least one third of a teacher's time and energy (Stiggin and Conklin, 1992). Therefore, building a healthy assessment environment can help instructional decision makers, as well as, support students' achievement (Stiggins, 2002). Teachers are responsible for setting, correction, interpreting, making instructional decisions and informed consent on test, therefore, the teachers' characteristics is important in understanding assessment practices. The school Systems worldwide are involved, to some extent in the development and implementation of some kind of academic assessment, tailored by teachers who are the most active components of the system. The value of classroom assessment lies in its instructive and judgmental roles for students, teachers and educational stakeholders. From the teachers' perspective, good assessments assist teachers in

evaluating the effectiveness of their teaching, providing them with a framework to fine tune teaching methods (Zeliff, 2000). It also monitors student progress and achievement, determines the performance levels of individual students and teachers, and controls program evaluation and curriculum review in an effort to improve instruction and teacher effectiveness. From the perspective of educational stakeholders, assessments allow people who are in-charge of it to get instructive insights about three critical functions: Selecting, Monitoring, and Holding Accountable. Assessment results, along with other measurement data, are valuable tools for educational institutions. They assist in evaluating the effectiveness of institutional practices by tracking the functioning of different components of the assessment system (generally referred to as national assessments), sometimes holding the individuals responsible for those components accountable, contributing to decision making about the functioning of departments, programs and curricula, and providing potential measures to be taken to improve all the cornerstones of an educational system. It can also play a role in planning . . . , in budgeting . . . , and in faculty rewards. . .” (Murphy & Harrold, 1997). It also allows departments, or division heads to evaluate the effectiveness of entire programs and allows schools to determine what, and how well, students are learning and how effective are both their instructional and assessment practices are to their students and the accountability measures set by their educational system. Therefore, investigating teachers’ characteristics and school environment is very important in the implementation of classroom assessment practices.

1.8. Scope of the Study

Teachers set the tone of their classrooms, build a warm environment, nurture and mentor the students, become role models for the students to follow as they act in their position of facilitators of knowledge in the classroom. Given the aforementioned characteristics of teachers in the classroom it is therefore necessary to study teachers’ characteristics and school environment in the implementation of classroom assessment practices. Teachers’ characteristics are many and varied. Coleman et al (1966), examined the impact of a number of teacher background characteristics, including years of experience, educational level, and performance on a vocabulary test, ultimately concluding that teacher background characteristics had a larger effect on achievement and classroom life. This study however limits itself to teacher qualification, teaching experience and teacher motivation. One of the main factors that influence classroom assessment practices is the teachers’ knowledge of subject matter. In this era of great expectation from the teachers, having a highly qualified

teacher has never been more important. The professional development of the teacher, as well as, the number of years of teaching is important for the implementation of classroom assessment practices. The level of a teachers' job satisfaction is also very important in the way classroom processes are practiced. Furthermore, school environmental factors of class size and teacher office space were seen as vital for influencing classroom assessment practices. Given that teachers are important actors in the educational system, therefore, their study is imperative in the understanding of assessment practices.

The area of study was also limited to four out of the ten regions in Cameroon, through the simple random sampling method. The four regions selected are the Centre, Southwest, Northwest and the Littoral regions. For an in-depth study of the phenomena, this study was limited to geography teachers.

1.9. Operational Definition of Terms

Teachers Characteristics

The basic model of educational effectiveness aimed to open the “black box” of a classroom, revealing teacher factors which contribute to student cognitive and non-cognitive outcomes (Scheerens, 2016). It was further developed into the dynamic model, which not only identified factors contributing to variation in student outcomes, but also attempted to explain the interrelation between these factors at different levels through the application of relevant theories (Creemers & Kyriakides, 2006). Teacher characteristics (comprising of professional knowledge, motivation and beliefs) are considered as model inputs, yet are recognised to be amenable through teacher education, experience and professional development (Scheerens, 2005). A central construct underpinning the analyses in the present study is the notion of teacher knowledge, which has been classified into content knowledge and pedagogical content knowledge in the seminal work by Shulman (1986). Content knowledge (CK) refers not only to the mere knowledge of facts and concepts in a domain, but also to its substantive and syntactic properties, i.e. “the teacher need not only understand that something is so, the teacher must further understand why it is so...” (Shulman, 1986, p. 9). Pedagogical content knowledge (PCK), in turn, covers the subject-matter knowledge for teaching, or the means of presenting the subject in a way that is comprehensible to students. Teacher characteristics, in this study, is composed of teaching qualification and teaching experience.

School Environment

According to Stott (1974) the term environment in its“ usual sense, encompasses all of influences upon development which come from outside the individual. Many researchers have proved that home environment and school environment effect the scholastic achievement of the student.

Human beings are always immersed in social environment, which not only changes the very structure of the individual or just compels to recognize facts but also provides with a ready-made system of signs. Two environments home and school share an influential space in child’s life (Tucker et al., 1979). The school is the most important experience in the process of child development next to home. When the child enters the school area, s/he is presented with new opportunities in terms of socialization and cognitive development. These opportunities are provided in different measures in school and may have a direct impact on cognitive and affective development of students. The concept of organizational climate of an educational institution for the first time came into existence in 1954, when the idea of organizational climate of schools was discussed. It is a concept which describes the role of participants interacting within the sociological and psychological framework of school interaction that take place within the school family.

The school is the most dynamic institution which should keep pace with the changing needs of the society. It should also develop in each individual the knowledge, interest, ideals, attitudes, habits, skills and powers, whereby s/he will find his/her right place in the social order and use that position to shape him/her and the society both towards the higher and nobler ends. The attainment of such objectives requires proper school environment. The school is a social-psychological system i.e. principal and teachers working in a school constitute socially and psychologically interacting units and through their interactions, school acquires a land of distinct personality or a distinct atmosphere. The school administration should work towards the improvement of school climate, so that a better output from school could be expected.

O. Neil (1987) defined school climate as a combination of eight variables:

- i Clear school mission.
- ii Safe and well-ordered learning environment.
- iii Expectation for success.
- iv Classroom interaction.
- v High morale.

- vi Effective instructional leadership.
- vii Monitoring of student progress.
- viii Positive home school relationship.

Lindelow (1989) suggested that school climate was defined as the feelings an individual got from experiences within a school system. More specifically, climate was the competitive of norms, expectations and belief characterizing the school social system as perceived by its members. It is an average of perceptions that individual has of their daily work environment (Deer, 1990). Owen (2000) defined organisational climate as the study of perceptions that individuals have of various aspects of the environment in the organization. So, majority of researches considered organizational climate as an attribute of an organizational perceptual in nature which is caused as a result of interaction over a period of time. However, some have used it to denote a combination of physical and psychological climate; very few have considered it as totality of all organizational variables. This is also true to some extent in relation to school. Hence, school environment may be defined as a measure of the quality and quantity of cognitive, emotional and social support that has been available to the students during their school life in terms of teacher/pupil interactions.

School is that agency of education from which different members of society expect in different ways. The government of any country is always interested in knowing how its investment is utilised effectively in school education. Educational administrators look from the view point of resources. They want to ensure that the available resources are effectively utilized. A parent expects that the school should give good education to his/her child. Students want the schools to be in places where they can enjoy learning. To a person living in a particular locality, the school should be pride to his/her locality. In this way, a school can be considered effective in the functioning to the extent that it satisfies the expectations for various persons concerned. Hence, the factors that affect the quality of education are the education administration system, headmaster, teachers, the teaching-learning process, parents, students, school, and community. A school is said to be effective when it achieves its objectives using the available resources efficiently, economically and sufficiently. It is quite natural that a school attracts more pupils when it enjoys high academic achievement.

Coleman et al. (1966) and Jencks et al. (1971) concluded that schools bring little independent influence to bear upon the development of their pupils. This period has been gradually followed in societies by the emergence of a wide range of effective schools. Five factor theory, generated and popularized by Edmond (1979), Wilson et al. (1994), and Lezotte

(1989), gave the characteristics for an effective school, which includes academic goal consensus, safe and orderly climate, strong instructional leadership, high expectation from student achievement, and frequent evaluation of student progress. Brookerover et al. (1979) provided a strong research base that generally supported the five-factor theory. By extending it, he proposes the seven-factor theory. Hathaway et al. (1983) and Barker et al. (2001) have promoted seven correlates as core to schools, where students learn and achieve. They are clear school mission; high expectation for success; instructional leadership; frequent monitoring of students' progress; opportunity to learn and student time on task; safe and orderly environment; and home and school relations.

Literature describes numerous factors that may enhance the school environment, including effective principal leadership, a safe and orderly setting, engaging extracurricular activities, reductions in the size and impersonality of schools, and educational programs designed to fit the unique needs of specific students and school contexts (Teddlie et al., 1993; Bryk et al., 1989; Comer, 1988; Eberts et al., 1988; Gottfredson et al., 1985; Landers et al., 1978). School environment is often as palpable as the weather. Some schools have a warm, friendly ambience, while others have a cold, foreboding environment that permeates classrooms and offices. School and classroom climate influences student performance (Hill et al., 1990; Fraser et al., 1982; Moos, 1979). In this study the school environment was limited to teacher motivation, class size and teacher work environment.

Classroom Assessment Practices

Classroom assessment englobes a broad spectrum of activities from constructing paper-pencil tests and performance measures, to grading, interpreting standardized test scores, communicating test results and using assessment results in decision making. When using paper-pencil tests and performance measures, teachers should be aware of the strengths and weaknesses of various assessment methods and choose appropriate formats to assess different achievement targets (Stiggins, 1992). Teachers struggle as they try to improve their assessment practices and make assessment decisions, mainly because the whole process is characterized by the tension between teachers' beliefs about assessments and the values they bring along, as well as other external forces that they have to consider along the way (McMillan, 2003). Classroom assessment encompasses a wide range of approaches for the ongoing evaluation of student achievement and progress, including structured tests and quizzes; worksheets; homework assignments; and informal assessment of student participation, effort and

behaviour. Classroom assessment methods vary just as much as instructional methods for students (McMillan, 2004).

Assessment methods can be classified as traditional or alternative based on the realism and complexity of the assessment tasks and the amount of time needed for the assessment (Gronlund, 2006). Teachers have traditionally used objective tests that measure specific skills using unbiased questions or scenarios. Traditional assessments such as multiple choice, true-false, and matching items are often lower in realism and complexities of the tasks assessed but require little time to administer and score (Gronlund, 2006). Alternative assessments such as portfolios, observations, and other performance-based assessments are higher in both realism and complexities of the tasks assessed and require more time to use and score than traditional assessments (Gronlund, 2006). There has been a movement toward the use of more alternative assessments than traditional assessments. The arguments in favour of alternative assessments over traditional ones are based on the notion that alternative assessments are more intrinsically motivating than traditional assessments (Shepard, 2000). Assessment practices are an assemble of all the processes of gathering evidence about a students' knowledge of, ability to use, and dispositions toward subject matter and making inferences from that evidence for a variety of purposes. Thus, assessment should be a bridge between teaching and learning, helping teachers collect evidence about student achievement in order to adjust instruction to better meet student learning needs (Wiliam, 2007, p. 1054). Classroom assessment practices englobe all the processes carried out by the teacher with the aim of knowing what the students have learned and the level of attainment of course objectives.

CHAPTER TWO: LITERATURE REVIEW

This chapter views work of other authors related to the study. It is imperative to study what other scholars have written about the different variables to have a deeper meaning of the variables.

A conceptual framework is a group of concepts that are broadly defined and systematically organized to provide a focus, a rationale, and a tool for the integration and interpretation of information (Bell, 2005, as cited in Enow 2019). In this case, the conceptual framework brings together the concepts of teacher qualification, teaching experience, class size, teacher motivation, teacher work environment, classroom assessment and teachers' assessment practices.

2.1. Conceptual Review

In accordance with what precedes, this section of the chapter specifies each of the concepts that the present research targets to manipulate in order to test and verify the previous hypotheses.

2.1.1. Concept of Teacher Qualification

Teachers' qualification is a particular skill or type of experience or knowledge someone possesses to make him or her suitable to teach. Teachers' qualifications could, therefore, mean all the skills a teacher requires to teach effectively. Such skills include formal education, experience, mastery of subject matter, pedagogic studies, duration of training, certificate/licensing and professional development (Zuzovsky, R. 2009). Someone might have a teaching certificate at hand but without adequate knowledge of subject matter, this individual has no teaching qualification yet. Similarly, someone without proper knowledge of pedagogy or someone who spent few years in training (Darling-Hammond et al,2001) without completing the required years does not possess teacher qualifications. Teachers' qualification is therefore, not only the certificate someone is holding as erroneously conceived by some people. Teachers' qualifications are more than just holding a certificate of any institution. In her study on "Teachers' qualifications and their impact on students' achievement findings from TIMMS 2003 data in Israel ties teachers' qualifications to seven indicators that are:

- Teachers' formal education
- Teachers' education in the subject matter of teaching (in-field preparation)
- Teacher education in pedagogical studies

- Duration of the preparation period
- Certification and licensing status
- Years of experience
- Preparation in professional development activities.

Teacher qualification is a concept determined by indicators such as teacher preparation, teacher licensure, teacher academic proficiency, teacher degree level, amongst others. As teachers have different teaching responsibilities, their involvement and use of assessment practices are more likely to differ. For this reason, they hold differing perspectives on the arguments made by Adams and Hsu (1998) and Stiggins and Conklin (1992), who made a compelling argument that teachers with varying characteristics such as teaching level and subject taught, may have different explanations for varying results in assessment practices

According to Collinson (1999), teachers` professional knowledge refers to their subject matter knowledge, curricular knowledge, and pedagogical knowledge. He argued that professional knowledge is influenced by the undergraduate degrees earned by a teacher, the college attended, graduate studies undertaken and opportunities to engage in on-the-job training, commonly referred to as professional development. Professional knowledge develops over time and interplays with professional experiences in the field. Student teachers need rich and meaningful experiences as a base for discussion and development of professional knowledge for teaching, (Schneider and Plasman, 2011).

Teacher knowledge is a component of teacher professionalism. However, professional competence involves more than just knowledge. Skills, attitudes, and motivational variables also contribute to the mastery of teaching and learning. Blomeke and Delany (2012) proposed a model that identifies cognitive ability and affective motivational characteristics as the two main components of teacher professional competence as follows:

Table 1: Characteristics of teacher professional competences

Cognitive abilities	Motivation
Professional knowledge	Self-regulation
General pedagogic knowledge	Professional believes about teaching and the subject content
Content knowledge	
Pedagogical content knowledge	Affective motivational characteristics

Adopted from Biomeke and Delany (2012).

The conceptualisation of teachers' knowledge entails the understanding of the teaching and learning process, the concept of knowledge, as well as, the way teachers' knowledge is put into action in the classroom. Some models see learning from the perspective of change in learners' behaviour, resulting from a change in learners' environment, while others see the teaching learning process only from the perspective of teaching and some take into account the students' input to the process. The table below shows the main components of the teaching learning process

Table 2: The Main Components of the Teaching and Learning Models.

Input from the teacher and the environment	Input from Students
Construction of knowledge in a particular subject	Generalability
Take place in social learning environment	Inputs from Students and aptitude
Continuous monitoring and assessment of learning	Prior knowledge
Opportunity to learn (incentives and time allocated for learning)	Motivation to learn
Quality and level of instruction	

Based on Carrol (1963) and Slavin (1984)

The student-factor is part and interdependent with the teaching-learning process. Teachers' pedagogic 'knowledge base' includes all the required cognitive knowledge for creating effective and learning environments. In his study of teacher knowledge, (Shulman, 1987) categorised teacher knowledge into seven categories, amongst which are the general pedagogical knowledge ie, principles and strategies for classroom management and organisations that are the cross curricular and, pedagogical content knowledge which is the knowledge that integrates the content knowledge of a specific subject and the pedagogical knowledge for teaching that particular subject. In recent decades researchers have attempted to revisit Shulman's conceptualisations of CK and PCK. One of the most influential re-conceptualisations is mathematical knowledge for teaching, or MKT (Hill, Ball, & Schilling, 2008).

MKT is a global construct comprising subject-matter knowledge and pedagogical content knowledge. In contrast, other researchers have claimed that CK and PCK are distinct, yet related constructs (Kleickmann et al., 2013). Additionally, CK has been found to be a

prerequisite for PCK development, i.e. teachers need profound subject matter knowledge for making content comprehensible for students (Friedrichsen et al., 2009; Krauss et al., 2008). While a variety of definitions of content and pedagogical knowledge have been suggested, throughout this study we draw on Shulman’s original conceptualisations, and treat CK and PCK as two distinct constructs. Teacher knowledge comes from various sources, such as teachers’ own educational experiences, teacher education, and teaching experience (Friedrichsen et al., 2009). Regardless of the quality of knowledge, putting it into practice may be challenging without positive self-efficacy beliefs.

The table below shows the main components of the various models

Table 3: Main Components of the Various Models of General Pedagogical Knowledge.

Pedagogical Components	Psychological Components
<ul style="list-style-type: none"> . Knowledge of classroom management: maximising the quantity of instructional time, handling classroom event, teaching at a steady pace, maintaining clear directions in lessons; . knowledge of teaching methods; having a command of the various teaching methods, knowing how and when to apply each method; . knowledge of classroom assessment: knowledge of the different forms and purposes of formative and summative assessment, knowledge of how different frames of references (social, individual, criterion-based) impact students motivation . structure: structuring of learning objectives and the lesson process, lesson planning and evaluation. . adaptivity: dealing with heterogenous learning groups in the classroom 	<ul style="list-style-type: none"> . knowledge of learning processes: supporting and fostering individual learning progress by having knowledge of various cognitive and motivational learning processes (eg learning strategies, impact of prior knowledge, effects and quality characteristics of praise, etc) , knowledge of individual student characteristics; have knowledge on the sources of student cognitive, motivational and emotional heterogeneity

Based on Voss, Kunter and Baumert (2011) and König et al. (2011).

According to OECD (2015), teachers' decision-making include antecedent conditions, such as students, the nature of the instructional task, the classroom, and the school environment, which combine with teachers' characteristics and cognitive processes to impact pedagogical decisions taken. It is however a cyclic process as pedagogical decisions in turn impact antecedent decisions. Most empirical studies concord that teachers informed pedagogical decisions are made by teachers able to analyse and evaluate specific learning episodes, in combination with contextual and situational factors, and to be able to connect all this information to their specialist knowledge of the teaching-learning process in order to guide subsequent teaching actions. Thus, making good pedagogical decisions hinge on the quality of pedagogical knowledge held by the teacher.

Greta and Kent contend that knowledge of educational ends and purposes is inseparable from knowledge about evaluation and assessment procedures. Therefore, the curriculum knowledge is fed by both content knowledge and knowledge of goals/assessment procedures, while pedagogical knowledge is fed by both knowledge of learners/learning and knowledge of goals/assessment procedures.

According to Verlopp et al, (2001); pedagogical 'knowledge base' of teachers refers to all the pedagogical-related knowledge that is relevant to teachers' activities in a teaching-learning situation. This would include both theoretical and scientific knowledge, such as theories of learning and practical or practice-based knowledge eg situated knowledge, but it is not meant to refer to guidelines or prescriptions for practice. In cognitive psychology 'knowledge' does not refer to a single concept- a distinction is made between 'declarative knowledge and 'procedural' knowledge, otherwise known as knowledge of facts and knowledge of how to ride a bike, respectively.

Pedagogic content knowledge (PCK) is the knowledge needed to make subject matter accessible to students (Shulman, 1988). Literature on PCK identified two core facets of that knowledge; knowledge of students' subject-specific conceptions and misconceptions as well as knowledge of subject-specific teaching strategies and representations.

When applying their pedagogical knowledge, teachers are making a 'professional judgement'. As Shalem (2014) argues that teachers' professional judgement depend on their theoretical knowledge and from practice-based knowledge which she defines as working of specific experiences. She argues that the theoretical or scientific knowledge that makes teaching a true

profession, that is, placing a teachers' judgement primarily on situated knowledge or knowledge that is acquired primarily experimentally is what contributes to de-professionalising teaching. For professionalisation to be maintained, teacher education or training is imperative.

According to Wikipedia, teacher education refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviours and skills they require to perform their tasks effectively in the classroom, school and wider community (Jamot, Ms,20). The concept of teacher education primarily states that the quality and extent of the achievement of the learners are determined primarily by the teacher competence, sensitivity and teachers' motivation. Teacher education comprises of all formal and non-formal activities and experiences that would help to improve the aptitude and qualify a person to assume the responsibilities of the members of the education profession or to carry out his or her job duties more appropriately (concept of teacher education, n.d.).

To ensure quality teacher education, we must have good educable materials, as it is important to attract and retain high caliber teaching personnel in education system in order to improve quality and productivity (Ukeje, 1991; Oyeka, 2000, Bandele, 2003). Therefore, quality teacher education should equip the teachers with good assessment methods, as this is the best way by which quality could be maintained in our schools. Quality education is a vital key to capacity building. CIDA (1996) defines capacity building as a process by which individuals, groups, institutions, or organisations and societies enhance their abilities to identify and meet development changes in a sustainable manner. Ayeleyemi (2002), defines capacity building as 'establishing resources needed to fulfil a mission or achieve a goal'. Therefore, quality teacher education is necessary for capacity building which will ensure national development.

According to Oyekan, (2000), teacher education is the provision of professional education and specialised training within a specific period to individuals who intend to develop and nurture the young ones into responsible and productive citizens.

Teacher education is regarded as an indispensable concept for the teachers at all levels of education, from pre-primary, primary, secondary to tertiary. The main focus of teacher education is based upon the levels of education. The needs and the requirements of the students vary with each level of education therefore, level and stage-specific teacher preparation is essential. Teacher education is indispensable in the development of teaching

skills among students. Teachers teaching in training institutions make use of specialised teacher training inputs with the purpose of training the students, who are making an entry into their professions. The aspects of teacher education are, Who (teacher education), whom (student teacher), What (content) and How (teaching strategy). Teacher education is dependent upon the quality of teacher educators. The quality of the pedagogical inputs within the teacher education programs and their operative utilisation for the purpose of preparing prospective teachers depend to a large extent on the professional competence of teacher education programs. Any country that wishes to sustain its educational system, must know what contribution teacher education programs make to the availability and employability of its teacher work force. Like no other component of a country's education system, teacher education possesses a multiplier function for the quality of schooling and learning throughout the system as a whole. It delivers generations of teachers, who in turn educate generations of pupils and students, who on their part carry with them and transform the knowledge and skills acquired in school, during the rest of their lives and work. A limited teacher's knowledge of a subject is found to cause teachers to focus more on certain concepts, and not be able to establish relationships between facts, concepts, structures and practices.

The weak teacher's knowledge of subjects creates limitations in applying various methods for understanding pupils (Walshaw, 2012). As such, the teacher's knowledge of various classroom evaluation practices is very important. The findings of the study by Mohd Fadhli Ahmad (2010) show the level of understanding of the practice of assessment among teachers at a high level. This high level of mastery is contributed by understanding and mastery of basic concepts of assessment, general principles of testing, planning of classroom assessments, test determination tables and item difficulty levels. According to his research, there are five principles to be considered in ensuring high-quality assessments of legality, reliability, objectivity, administration and interpretation. The findings of the study by Mohd Fadhli Ahmad (2010) show the level of understanding of the practice of assessment among teachers is at a high level.

The duration of teacher training depends on the qualification at entry. In Cameroon for example an entry with the minimum qualification, which is the Advance level certificate, is 3 years of training and 2 years of training with a first degree. The qualifications are equally not the same. The 3-year program ends with a diploma in teaching (DIPES I or DIPET 1), while the two-year program ends with a Higher Teachers' Diploma in teaching (DIPES II or DIPET

II). A teacher with the DIPES 1, may have to do a one-year program in the university to obtain a first degree in Cameroon. Professional development is also encouraged as teachers with DIPES 1 can apply for selection to attend the higher teachers' college for two years to become DIPES II, after 3 years of teaching, and after ten years it becomes automatic.

According to Goods Dictionary of Education, Teacher Education means all the formal and non-formal activities and experiences that help to qualify a person to assume responsibility of a member of the educational profession or to discharge his responsibilities more effectively. Teacher education encompasses teaching skills, sound pedagogical theory and professional skills. Teaching skills provide the training and practice in the different techniques, approaches and strategies that would help teachers to plan and impart instruction, provide appropriate reinforcement and conduct effective assessment. It also provides effective classroom management skills, preparation and use of instructional material and communication skills. Pedagogical theory on the other hand includes the philosophical, sociological and psychological considerations that would enable the teachers to have a second basis for practicing the teaching skills in the classroom.

The theory is, however, stage specific and is based on the needs and requirements that are characteristic of that stage. While professional skills according to Lal (2016), include the techniques, strategies and approaches that would help teachers to grow in the profession and also work towards the growth of the profession, and includes soft skills, counselling skills, interpersonal skills, computer skills, information retrieving and management skills, and life-long learning skills. Teacher education refers to the structures, institutions and processes by which men and women are prepared for work in elementary and secondary schools.

Teacher education has to consider the changing times of modernity and technology. The teachers are required to focus upon rendering their job duties in a manner that would not only lead to enhancement of academic knowledge among the students, but also in leading to development of morality and ethics among them. Goodson (2007) notes that increasing globalisation and knowledge-based economies place additional demands on schools, as well as adversely affect the "hearts and minds" (P.137) of teachers as human beings. Truly the quality teachers' of today need resemble those qualities embraced, shared, and communicated within and across disciplines. Future teachers need to possess many skills in order to be prepared for their multidimensional roles in today's multicultural and complex schools.

Another important indicator of teacher preparation is teacher content knowledge. Content knowledge generally refers to the body of content and information that teachers teach and that students are expected to learn in a given subject or content area, such as Geography, English language, science or social studies. Content knowledge generally refers to the facts, concepts, theories, and principles that are taught and learned in specific academic courses, rather than to related skills-such as reading, writing, or researching-that students also learn in school. Content knowledge represents teachers' understanding of the subject matter taught.

According to Shulman (1986), "The teachers need not only understand that something is so, the teacher must further understand why it is so" (P.9). The common characteristics of content knowledge are having a broad understanding of curriculum aims and objectives; having a wide range of pedagogical strategies; having high expectations of all students; knowing students well; providing effective feedback; recognising students' success and having sound content knowledge of the subject. Good teacher knowledge of subject content was found to have a positive effect on decision-making related to changing pedagogical strategies for creating better learning opportunities. In addition, sound content knowledge seems to have a positive effect on planning, assessment and implementation of curriculum. Harlen and James (1997) opine that teachers cannot provide experiences and activity development that guide students progress towards understanding of ideas, if they themselves do not know what the ideas are. If teachers generally have sound pedagogical skills, they rely on them to carry them through difficult aspects of the subjects they teach. Corcoran and Goertz (1995) provide substantial evidence that content-relative knowledge had a positive impact on student performance.

Ties between teacher subject knowledge, how that is transformed into classrooms and assessment ability have been acknowledged (Bell and Cowie, 1997). When teachers are unsure of their discipline structure they are not well equipped to guide learning in it or assess that learning. Good knowledge of subject matter enables teachers to construct learning hierarchies, which provide a blueprint for devising assessment procedures (Carr et al, 2000). Black et al (2001) assert the need to analyse the interplay between models of cognition and learning, views of the nature of the subject matter, and the selection and articulation of goals and subject matter that follow. They support the view that the specific nature of subject matter is an important determinant on how teachers' carryout teaching in their classrooms.

On the other hand, Askew et al, (1997) found no relationship between teachers' level of subject qualification and student progress in Mathematics. Instead, there was a strong correlation with their pedagogical content knowledge.

Teacher education ends up with a certification. Teacher certification is qualifying as a teacher, at an institution of higher education, usually after the requisite course of study. Occupational license is a system whereby a government entity regulates entry into an occupation. Arais et al (2009) opines that licensure testing is intended to distinguish between those who are competent to enter the classroom in terms of the skills measured by the test and those who are not. Teacher licensure is a regime where schools are forbidden from hiring teachers who have not completed a program of study in a teacher education program and or other preparation requirements. Ideally, tests would do this just as in other professions, by limiting the supply of teachers only to those who are competent. Well-designed induction and support programmes for beginning teachers can improve teacher retention rates and, more generally, enhance the effectiveness and job satisfaction of new teachers (OECD, 2005).

Formal induction programmes are mandatory in about half of the countries with available data and are similar for all levels of education. For teachers at the lower secondary level, for example, formal induction programmes are mandatory in 18 of the 33 countries with available data, and are at the discretion of schools in the other eight countries. In most countries where these programmes are mandatory (13 of 18 countries), successful completion of the induction programme is required to obtain a full certification as a teacher. Only in Estonia, Japan, Korea and Mexico is induction mandatory without being linked to full certification of lower secondary teachers. The duration of induction programmes in the countries with available data ranges from one month or less in Greece, Korea and Mexico, to 24 months in Hungary (the average is 10.6 months).

In most countries (23 of 25 countries with available data and induction programs for lower secondary teachers), other teachers in the school serve as mentors; and in 21 of 25 countries, school management is also responsible for supporting beginning teachers. Persons from outside the school are less commonly involved in supporting new teachers: for example, staffs from teacher education institutions are involved only in around one-third of the countries; and the inspectorate and the local education authority in only 4 countries. However, in half of the countries with induction programs and available data, induction is organised in collaboration with the school and the teacher education institution or the ministry. In two out of three

countries, there is no training requirement for people who provide support to new lower secondary teachers, but in some countries, these people are offered some sort of compensation. In 8 of the countries with induction programs and available data, they receive a salary allowance; in 3 countries they receive a time allowance.

2.1.2. Concept of teaching experience

Teaching experience relates to general pedagogical beliefs, self-efficacy belief, and, indirectly, to practices (Black & Ammon, 1992; OECD, 2009). In recent years, much research and policy making in the USA has been guided by an assumption that teachers' experience has little bearing on a teacher's effectiveness after about two or three years of his/her career (Henry et al., 2011). They assumed that teachers show much of their productivity during their first few years of working, after which they level off. However, there is a debate on whether or not teachers continue to learn as they gain additional experiences in the classroom.

According to Tamakloe, Atta and Amedahe (2011), every aspect of instructional programme of a school depends on the effective management of students in the classroom. There is therefore, a need for co-operation between all members of the school for successful and effective teaching and learning to take place. Teaching experience will look at the variables of instructional time, number of years of teaching, number of years of setting and marking of national examination, giving of feedback to students and the professional development programs for teachers.

Time is a very important resource which has to be managed well if we want to accomplish our objective. Hindle (2009) opined that "time is costly; it is a sobering exercise to calculate exactly how much one's time costs and then realize how much of it is not being spent effectively" (p. 8). In Ghanaian schools, activities are programmed for both curricular and co-curricular activities. A plan of action is then drawn to cover a whole year. This presupposes that any instructional time wasted or under-utilized will result in a limited coverage of the designed curricular which will in turn have a tremendous adverse repercussion on students' academic achievement (Koomson, Akyeampong & Fobih, 2009). As a matter of fact, for effective teaching and learning outcomes, instructional time allotted on the time-table should be judiciously adhered to. Many schools of thought have propounded that 'time' is an intangible resource and one of the major features of human development. In fact, it is said that time is a non-renewable resource and effective use can be considered to be one of the indicators of socioeconomic development. According to Dowden (2011), time is strictly finite

and cannot be increased so one has to look at its use closely. Thus, instructional hours should be used efficiently to enhance both the teaching and learning processes.

Woelfel (2010) indicated that social scientists and educational experts find the concept of instructional time to be intellectually unexciting, so common sense, and of such obvious importance that it only leads to trivial understanding. Some have dismissed the results on instructional time as an ideology, but not research (McNamara, 2010). Others have argued that when the concept of instructional time becomes the basis for creating a variable with which to do research, the measurement issues prove more complex apparently because most scientists conceptualize instructional time as a simple variable (Karweit & Slavin, 2010; Karweit, 2011). The amount of time that students spend in public schools varies widely from one country to another. For example, among European countries such as Belgium, France, and Greece, 15-year-old pupils receive an average of more than 1,000 hours per year of total compulsory classroom instruction, while in England, Luxembourg, and Sweden the average is only 750 hours per year.

As well, children from the ages 7-8 in England, Greece, France, and Portugal receive an average instructional time of more than 800 hours per year, while in Finland and Norway they receive less than 600 hours. Similar differences among countries exist in the number of classroom lessons per week in different subjects as evident from data from the 2006 Program for International Student Assessment (PISA), a unique international education survey of 15-year-old students conducted by the Organization for Economic Cooperation and Development (OECD) and designed to allow for cross-country comparisons. For instance, these data shows that 15-year-old pupils in Denmark receive 4 hours of instruction per week in Mathematics and 4.7 hours in language, while pupils of the same age in Austria receive only 2.7 hours of weekly classroom lessons in Mathematics and 2.4 hours in language. Overall, total weekly hours of instruction in math, language, and science is 55 percent higher in Denmark (11.5 hours) than in Austria (7.4 hours). Similar magnitudes of disparities in instructional time appear among the Eastern European countries and Africa that are included in the PISA 2006. Royelli (2011) and Merrin (2010) opined that a key educational resource which provides a good foundation to support efforts in improving the quality of teaching and learning in schools is the way time is used as an instructional tool.

Indeed, it is long established that time management is unsuitable in the sense that many people cannot really manage time, let alone produce it; for it is a gift of nature. In this regard, it rests on people to see to its proper management. Berliner (2011) asserted that instructional

time should be thought of as a super-ordinate concept and in this way; it is not different from the concept of ‘mammal’. Thus, when instructional time is conceived as to a family of concepts, some of its members have not yet achieved the status of concepts in other mature scientific fields. That is, “we do not always have an agreement about the meaning of the concept and about the operations by which it can be reliably and validly measured” (Berliner, 2011, p.6).

Among the many terms embedded by the super-ordinate concept ‘instructional time’ includes allocated time, engaged time, time-on-task time, academic learning time and waiting time.

According to Jimerson, Woehr, Kaufman and Anderson (2009), Allocated Time usually defined as instructional time as the time that the state, district, school or head teachers provide for instruction. For example, a school may decide that reading and literacy be taught for a period of ninety (90) minutes. Silva (2010) on the other hand, defined Engaged Time as the time that students appear to be paying attention to materials or presentation that have instructional goals. Engaged time is always a subset of allocated time, in fact, a synonym for engaged time is “attention”. Baines (2009) also explained Time-on-Task time as an engaged time on a particular learning task. The concept is not synonymous with engaged time, but it is often used as if it were. According to Chmelynski (2009), Academic Learning Time is that part of allocated time in a subject-matter area in which a student is engaged successfully in the activities or with the materials to which he or she is exposed, and in which those activities and materials are related to educational outcomes that are valued. Waiting Time, according to Alexander, Entwistle and Olson (2011) is the time that students must wait to receive some instructional help

The old adage “Time lost is never found” rings especially true in the classroom.

Teachers need two types of planning time; individual planning time to focus on what they’re doing in their own classrooms, and common planning time with colleagues who teach the same grade level or subject. Individual planning time is needed every day in order to prepare materials for upcoming lessons, review students’ work, and interact with specialists and parents about individual students. Common planning time occurs once or twice weekly and is often set aside for meetings with teachers in the same subject or grade level, or specialists who work with the same students.

Common planning time enables teachers to meet and collaborate on important work and decision making about students and instruction. In many schools, this happens through

professional learning communities (PLCs) when groups of teachers collaborate to plan, implement, reflect on, and modify instructions as they strive to help students learn. PLC work for most teachers and it is very productive.

Time management is the thread running through almost all aspects of teaching - organising the day, organising the classroom, deciding how long and how often to teach various subjects, recording students' progress, or keeping time-consuming behaviour problems to a minimum. Students only have so much time in your classroom.

Effective use of school time begins with efficient classroom organisation and management and vice versa. Much of the essentials of classroom life involve time management in some way: paring down paperwork; planning; establishing routines that eliminate wasted time and confusion; using learning centres, independent assignments, and seatwork to give you time to work with small groups; and creating classroom environments that allow students and activities to move smoothly from one activity to the next.

Wong and Wong (1998) describe four different types of school-day time:

1. Allocated time. The total time for teacher instruction and student learning
2. Instructional time. The time teachers are actively teaching
3. Engaged time. The time students are involved in a task
4. Academic learning time. The time teachers can prove that students learned the content or mastered the skill

According to research reported in Wong and Wong (1998), the typical teacher consumes 90 percent of allocated time. Yet the only way a student learns anything is by putting in effort by learning to work.

Effective time management is one of the skills necessary for success in school, as well as, in everyday life and in the work place. Students need time to practice, rehearse, review, apply, and connect new learning and relate it to their everyday lives. Teachers who effectively manage time give their students the best opportunity to learn and to develop personal habits that lead to wise use of time. Educational authorities have in the past developed lots of techniques on the effective use of instructional time. Cerdan-Infantes and Vermeersch (2010) argued that time management is an essential feature of a very effective and productive educational system which all educators need to come to terms with. Bray (2006) indicated that successful time management evolves in a step by step approach with the primary aim of

setting priorities in the school. This calls for a decision to be taken and all activities tabulated in order of importance. Every school head needs to prioritize by developing plans both in the short-term and in the long-term. This is because, planning is a managerial process and that the head has to plan the school activities at the beginning of each academic year. Thus, it behoves on the head and his or her subordinates to plan for the daily, weekly and term's activities of the school (Cerdan-Infantes and Vermeersch, 2010; Bray, 2006). In most school situation, the tools for planning are the syllabuses and the schemes of work (Abadzi, 2009). In Ghana, prior to the implementation of the 2007 Educational Reform revised syllabuses were issued to the District Directors of Education for onward distribution to the schools.

As Tamakloe et al (2011) asserted, teaching like any human endeavour demands serious inclusiveness and participation. A well-taught portrays more quality and expertise, so every successful teacher plans his or her scheme of work in advance; breaks the syllabus into teachable units and arranges them logically.

Time is a precious commodity for teachers. Most teachers would argue that they never have enough time to reach every student, particularly the ones that are below grade level. Therefore, every second a teacher has with their students should be a meaningful and productive second.

Many other countries with higher-performing students give teachers more planning time within their contracted hours. Secondary school teachers in the United States and Chile spend significantly more time instructing students than the average of 20 hours weekly in other countries (OECD, 2014a). Yet students in Chile and the United States score below other countries where teachers spend less time with their students.

Papay and Kraft (2015) attest that teachers experience rapid productivity improvement early in their careers. However, they also found evidence of returns to experience later in the career, indicating that teachers continue to build human capital beyond these first years.

Many occupations recognize employees' years of experience as a relevant factor in human resource policies, including compensation systems, benefits packages, and promotion decisions. The idea is that experience, gained over time, enhances the knowledge, skills, and productivity of workers. In education, teacher experience is probably the key factor in personnel policies that affect current employees: it is a cornerstone of traditional single-salary schedules; it drives teacher transfer policies that prioritize seniority; and it is commonly considered a major source of inequity across schools and, therefore, a target for redistribution.

The underlying assumption is that experience promotes effectiveness. But is this really the case? (Rice, 2010).

Planning and developing classroom assessment tasks requires teachers to make a number of decisions, such as determining the purpose of the assessments, making decisions on how to use assessment results, making decisions about the content to be included in tests, determining the instructional objectives (skills) to be measured, identifying the types of assessment formats to be used, deciding on a number of items to be used and determining how students' responses will be graded (McMillan, 2008; Nitko, 2001; Popham, 2008; Reynolds, Livingstone & Wilson, 2009). Stiggins (1994) argued that building a test without a plan is like building a house without a blueprint. Stiggins's view is that two things will happen, test construction process may take much longer than anticipated and the final product may or may not be what the teachers had hoped. This clearly indicates that teachers need more guidance for them to be more competent in basic test planning and construction methods.

Campbell and Evans (2000) evaluated assessment practices of pre-service teachers who had just completed a course in educational measurement. The authors reviewed 309 pre-service student teacher lesson plans, and found that none contained all the necessary criteria established as necessary for evaluating students' learning. Student-teachers failed to use test planning practices such as a table of specifications, which is necessary to make a direct link between instructional goals and test items. The authors believed that by omitting test planning practices, pre-service teachers were unable to explicitly document the association between curriculum goals, instruction, and student achievement. One of the essential steps in assessment practices that is often taken for granted but serves an important role is for teachers to make decisions as to why they are assessing students.

Teachers may want to make a decision to use assessment information to diagnose students' learning problems, guide and improve future instructional methods, or just for summative evaluation to determine students' final grades at the end of the term (Airasian, 1994; Gronlund & Waugh, 2009; McMillan, 2005; Popham, 2006; Reynolds, Livingston, & Willson, 2009). Airasian (1994) devised a list of decisions that teachers should make as they embark on their classroom process. Airasian encouraged teachers to base their decisions on the following: What to test, how much emphasis to give to each instructional objective, what type of assessment tasks, (tests, projects, assignments) to use, how much time to allocate for

each assessment task, how to prepare students for the assessments, and whether or not to use tests from textbooks, or construct their own tests. Other important factors that teachers must take into consideration when planning tests include; subject matter, domain assessed, test constructor or user such as (ease of test preparation, ease of scoring test, etc.), and various extraneous factors for instance (guessing, copying, bluffing) possibly affecting the psychometric properties of test scores (Zeidner, 1987, p. 352). Some researchers argued that the level at which teachers design, develop, embed, and implement classroom assessment practices is not clearly articulated. For this reason, Ayala, Shavelson, Ruiz-Primo, Brandon, Furtak, Young, and Tomita (2008) outlined five critical activities that comprise the phase of embedded assessment development that teachers can adopt as they design, develop, embed, and implement classroom assessment practices. These include: (1) Mapping and experiencing the curricular unit in which the classroom assessments will to be embedded, (2) Determining the unit goal to be assessed, (3) Determining the critical points where the assessments should be embedded, (4) Defining the assessment development guidelines, and (5) Developing the assessments. On the same note, Stiggins (1994) added other effective types of test planning activities that teachers can choose from to improve their assessment practices.

Stiggins argued that teachers can use a table of specification, a two-way table that matches the objectives or content teachers taught with the level at which they expect students to perform. It contains an estimate of the percentage of the test to be allocated to each topic at each level at which it is to be measured. Teachers can also rely on a list of instructional objectives to guide their test construction process. Teachers can match the instructional objectives with assessment tasks (tests, assignments, projects). All these steps are essential for planning assessment tasks, however, the single most important test planning and construction process that teachers must understand is how to design appropriate learning objectives also known as learning outcomes, which specify what the teachers want students to know or be able to do at the end of the course or at the end of a unit, topic, term, or a class activity. Everything that goes on the course including instructional methods used, assessment methods used (tests, assignments, projects) are driven by learning objectives. For this reason, teachers must have a good understanding of how to construct specific, measurable, attainable, realistic, and student-centred instructional objectives (Airasian, 1994; Gronlund & Waugh, 2009; McMillan, 2005; Popham, 2008; Reynolds, Livingston, & Willson, 2009).

Peer assessment, a process by which learners rate their peers, is, as of great relevance to teacher development. It signifies the joint collaboration by those involved in the learning

process in the appraisal of their own learning. In a peer-assessment arrangement, the learners consider “the amount, level, value, worth, quality or success of learning of peers of similar status” (Topping, 1998). Peer assessment is not only a direct appraisal of what has been learned (outcomes) but also of the how of learning (process). The supposed beneficial effects of peer assessment are not only diverse, but also inconclusive (Falchikov, 2005).

Peer assessment (and its related format: co-assessment, that is, mentor/assessee) is said to help learners develop meta-cognitive skills, for example, communication skills, self-evaluation skills, observation skills, and self-criticism (Havner and McDowell, 2007); and this may lead more readily to acceptance of feedback. However, supposed effects of peer assessment for learning vary considerably. The findings range from better attendance, learning gains, impact on the ability to self-assess, developing critical thinking, to no effects at all (Topping, 1998). Peer assessment in essence is a social appraisal process where feedback is given to and received by others, aimed at enhancing the performance of the learner'. Therefore, interpersonal and interactional processes play an important role, such as psychological safety, value diversity between peers, interdependence in social relations, and trust in the other as an assessor. Framing features in the arrangement of peer assessment might condition how peers step into the process of appraising each other's learning results. A first set of framing features has to do with specifying the contextual arrangement of the assessment, that is:

the why, that is, reasons for utilizing peer assessment;

the what, that is, objectives, teaching areas, and products/outcomes;

when, that is, time;

where, that is, place; and

how, that is, is it supplementary to grading or required; compulsory or voluntary?

A second set of framing features considers the interaction among peers in the appraisal; because of the interpersonal factors mentioned, the assessment might vary with respect to who assesses whom. This directionality in peer assessment can be one way (from assessor to assessed), reciprocal (peers assess each other, e.g., in pairs), and mutual (all peers assess all peers). In addition, peer assessment may differ in level of privacy (anonymous, confidential, and public) and nature of contact between assessor and assessee (at a distance or face to face).

A third set of framing features refers to the composition of the peer group that provides feedback, it can differ in ability or not.

The grading of students during assessment is an important aspect in the teaching and learning and assessment process and the experience of a teacher has an important role to play.

Grading is the process of judging the quality of a pupil's work or performance. It is the process by which scores and descriptive evidence are converted into marks or letters, i. e. grades, which indicate how well each child has learned (Airasian, 1996). Grades are a traditional and nearly universal means of documenting pupil achievement. Although pupils and parents place a substantial significance on grades (Rowntree, 1977), few teachers have had formal training for it (Hills, 1981). Grades are formal and important elements of a pupil's record. Grading is a difficult task for teachers because they wish to be objective and fair to all pupils. Given that teachers most often know each child very well the real problems they might face is objectivity of the grading (Airasian, 1996). As far as grading forms are concerned, teachers find it very difficult to find the best way to communicate children's progress in an effective and meaningful manner to the interested parties. Because parents and pupils are aware of the grading scales (I - 10), (11-20), letter scales (A, B, C); descriptive scales, (excellent, very good, satisfactory, adequate); or (pass-fail), most of the education systems use such scales to communicate children's progress (Gronlund, 1976-, Hills, 1981; Airasian, 1996).

According to Airasian (1996), grading serves three wider purposes: administrative, informational and motivational. Schools use grades administratively to determine pupils' rank in class, credits for graduation, and suitability for promotion to the next level. Informally, grades are used to inform parents, pupils, and others about a pupil's performance. Grades summarize how well the children mastered the material taught during a term or a session (Rowntree, 1977) and are also used to motivate pupils to study (Airasian, 1996). Except for serving as a measure of achievement, grades are an important medium for communicating with parents and within the schools. Such information can be used by parents to cooperate with the teacher and also to support and encourage their children (Wright & Wiese, 1988; Airasian, 1996). Grades are the overt criterion for the evaluation of the curricula at national, local School, or class levels (Gipps, 1990). They are used as the basic information to guide and consult pupils for future studies and career selection (Fragos. 1984). There are, however, certain criticisms which can be levelled at the grading system. Information is lost, because

grades do not tell all that is known about the pupils' performance or abilities (Rowntree, 1991).

Ebel (1982) argues that there are problems like the lack of a commonly accepted definition of what represents a mark, that often, marks are used as a means of reward, or sanction, so that sometimes marking becomes a vehicle of injustice instead of fairness. Thorndike (1969) points out that grade often lack reliability, which makes meaningful comparisons across classes or schools difficult. He also notes that teachers use grades ineffectively and that grades are an inadequate means of communication. Such difficulties appear mostly at the elementary schools where grading systems use peer performance as a frame for reference and result in letter or number categories.

The normative performance of previous pupils is the most meaningful standard in generating grades; however, this standard usually consists of an imprecise standard developed through teacher experience (Hopkins & Stanley, 1981; Wright & Wiese, 1988). Opponents of grading criticise the abuse of grades as a punishment because pupils have not studied or because they do not obey the classroom or school rules giving grades. Moreover, they dispute grading because it acts as rewarding by rote learning and fostering the children's competitive and grade-hunting attitudes. There is also the subjective dimension in giving grades (Avdali, 1989). Although motivation may be enhanced when performance is high, it may also be diminished when a grade is lower than the pupil expected. Frequent failures inhibit the joy that is related to learning; they limit the demands one puts for him/herself; pupils have doubts of their abilities and they are not confident (Airasian, 1996). Grades make pupils winners and losers. The winners are approved of and encouraged while the losers are disapproved of and discouraged. As a result, the good become better and the poor become worse. Grades create an atmosphere of competition instead of co-operation (Crooks, 1988).

Broadfoot (1994) reports that, in France, apart from the lack of genuinely formative assessment and guidance, a consideration of teacher assessment reveals the predominance of numerical marks despite widespread recognition that they are unconstructive and difficult to interpret because of the lack of objectives and criteria (Bottin, 199).

Marking and grading can never be totally fair since these approaches can only deal with limited and specific areas of school work and of the pupils by the teacher (Alexander, 1984). The need for better practices in evaluating children's performance and work is imperative.

Dowling & Dauncey (1984) suggest talking about the matters with the pupils immediately or encouraging the pupils themselves to write in evaluative comments or notes for future reference. Some schools in the USA prefer parent-teacher conferences or the use of descriptive, criterion-referenced evaluation instead of the traditional report (Lemlech, 1984). In the U. K., many schools are moving towards more informative and open-ended ways of assessing pupils' progress which emphasise pupils' achievements rather than deficiencies and avoid rank orderings (Broadfoot, 1987; Reid et al., 1988; Pollard et al., 1994).

In an attempt to explore grading practices, issues of judgment, communication, and character development in grading through a framework which exposes the underlying moral issues in grading, (Zoeckler, 2007) examined how teachers arrived at a fair grade while weighing both achievement and non-achievement factors. The role of teacher expectations was also examined using a theoretical framework which considers grading processes in terms of truth, valuable trust, and intellectual and moral attentiveness. Zoeckler (2007) collected data from rural high school teachers in upstate New York through interviews. What emerged in this study was that teachers continue to struggle with issues of fairness as they grade students' work. The main argument that Zoeckler made was that teachers' grading and feedback to students is influenced by teachers' values and beliefs. Zoeckler argued that even though teachers' moral issues in assessment often go unexplained, they play a major role in the assessment practices they adopt. McMillan and Nash (2000) studied reasons teachers give for their assessment and grading practices and the factors that influence such practices. In most studies, interviews with teachers revealed that decision making about grading was influenced by the desire to use grading practices that encourage student engagement, motivation, and understanding. Most teachers in McMillan and Nash's study viewed grading as a larger part of philosophy of teaching and learning that needs to accommodate individual differences. Teachers saw the use of non-achievement practices, such as effort, as a way to judge motivation and engagement, while ability and improvement were consistent with broader beliefs about the importance of individual differences amongst students.

The option of including the grades from peer assessment is mostly limited in most classrooms but deliberating on the marks can help reduce the impact of subjectivity in classroom assessment.

Part of grading practices entails the process of giving students feedback. Another indicator of teaching experience is feedback to students. In their research article 'The Power of Feedback', John Hattie and Helen Timperley (2007) defines feedback as "information provided by an

agent (e.g., teacher, peer, book, parent, self, experience) regarding aspects of one's performance or understanding" (Hattie & Timperley, 2007). Feedback often occurs after a student's response, or when information is provided about the specific task at hand. Simply said, it is a teacher's response to a student's work.

The use of feedback has become an important practice by teachers in the classroom. Though research has proven it to be beneficial, it is not always practiced by teachers. The type of feedback, timing of its use, and way it is used may have positive effects on students in the classroom. Feedback can work in several different ways. If there is a challenging task at hand, receiving feedback can produce more efforts from students on future work. Feedback has a higher success rate when there is a clear goal set. The more specific the goal, the more effective it is because it produces more focus and feedback from the students. Feedback is information provided by an agent regarding aspects of one's performance or understanding (Hattie and Timperley, 2007). Sadler (1989), claims that the main purpose of feedback is to reduce discrepancies between current understandings and performance. In relation to this, Hattie and Timperley (2007), argued that feedback can have different perspectives: "feed-up" (comparison of the actual status with a target status, providing information to students and teachers about the learning goals to be accomplished), "feed-back" (comparison of the actual status with a previous status, providing information to students and teachers about what they have accomplished relative to some expected standard or prior performance), and "feed-forward" (explanation of the target status based on the actual status, providing information to students and teachers that leads to an adaption of learning in the form of enhanced challenges, more self-regulation over the learning process, greater fluency and automaticity, more strategies and processes to work on the tasks, deeper understanding, and more information about what is and what is not understood).

Additionally, feedback can be differentiated according to its level of cognitive complexity: It can refer to a task, a process, one's self-regulation, or one's self. Task level feedback means that someone receives feedback about the content, facts, or surface information (How well have the tasks been completed and understood? Is the result of a task correct or incorrect?). Feedback at the level of process means that a person receives feedback on the strategies of his or her performance. Feedback at this level is aimed at the processing of information that is necessary to understand or complete a certain task (What needs to be done to understand and master the tasks?). Feedback at the level of self-regulation means that someone receives feedback about the individual's regulation of the strategies they are using to their

performance. In contrast to process level feedback, feedback on this level does not provide information on choosing or developing strategies but to monitor the use of strategies in the learning process. It aims at a greater skill in self-evaluation or confidence to engage further on a task (What can be done to manage, guide and monitor your way of action?). The self-level focuses on the personal characteristics of the feedback recipient (often praise about the person). One of the arguments about the variability is that feedback needs to focus on the appropriate question and level of cognitive complexity, if not the message can easily be ignored, misunderstood or be of low value to the recipient.

Hattie and Timperley (2007), talk of four task levels of feedback which can practically be explained as shown; they say that feedback can be about a task or product and can include direction on how to improve. For instance, when teachers return scripts with corrective notes on how to improve, written on them. Secondly, feedback can be directed to assist the learning process to help students better understand a task, such as answering a question. The third level of feedback can be looked at as personal feedback. It can have a focus on the self-evaluation part of an assignment to see if a student can work through a task by themselves by using techniques that were already taught. This level can increase student's self-efficacy and boost self-esteem levels. The last level of feedback is personal feedback that is unrelated to a task. It is usually a general form of praise such as saying "you are a great student!" The most common form of feedback, which is also the first level, often called "corrective feedback", focuses on the correctness of behaviour or other factors pertaining to a task accomplishment. Written comment feedback on work in conjunction with a grade has proven to be more effective than just one or the other.

A comment such as "good work" is vague and doesn't contain task-related information. Therefore, it doesn't lead to higher levels of commitment or higher self-efficacy or understanding about the task. Teacher praise is a popular reinforcement method that is placed in the personal feedback category. Burnett (2002) reported that praise is recommended for teachers because "it can build self-esteem and provide encouragement". Though praise can strengthen self-efficacy, it is being argued as to how providential it is. Paul Burnett's study on teacher praise and feedback says "teacher praise...is a more intense, detailed response to student's behaviour than feedback" (Burnett, 2002, p. 6). Hattie and Timperley (2007), opposing Burnett's view say that praise isn't that effective to students because it doesn't carry a lot of information or provide answers. But they say if it is specifically directed to the task and performance of it, it can help with self-efficacy. Burnett found that 91% of elementary

students he measured liked to be praised. 69% of those same students preferred not to receive public praise (Burnett, 2002, p. 7).

This suggests that students may find public praise to be embarrassing. Hattie and Timperley's (2007) measurements of students found that while elementary students enjoyed being praised for their achievements, older students tended to think the teacher thought they had lower abilities because they were being praised. Feedback and praise produce positive effects on students. Feedback gains the upper hand because it gives students more specifics as to what can be improved, helping them learn the lesson better. Praise on the other hand may encourage the student, but may not influence them in other ways. Using feedback in a classroom can be as simple as writing a few notes on a student's essay, math homework, quiz, etc. Correcting a paper and writing or telling a student how to find the right answer allows the student to understand the concept better and know why they got it wrong and how they can correct it. Feedback is an important factor in today's classroom, and should be implemented in every classroom.

Feedback is an inseparable part of the assessment and learning process. A deeper understanding of its significance and function will help the interpretation of the study's data. Hence, it is important to consider the nature of feedback; the forms it takes; its effects on pupils and how it can be used more effectively to assist learning.

Clement and Frandsen (1976) have pointed out that, despite the apparent simplicity of the concept of feedback, the literature suggests various interpretations of the term. It is therefore necessary to distinguish which one is appropriate for the teacher and to differentiate between feedback, criticism and teacher praise. According to Rarnaprasad (1983), feedback is information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way.

In daily classroom life, teachers inform their pupils how far away they are from the desirable outcomes. Often this information has positive or negative meaning encouraging a desirable outcome or discouraging an undesirable one. Praise and criticism reflect those two approaches. In the classroom, feedback is provided either immediately at the end of an assessment period, or after a longer period. Simultaneous feedback has been systematically studied in two major formats. One used non-verbal messages and the other verbal messages to provide instantaneous feedback during teaching. Most studies suggest that pupils need to get

feedback soon after their performance. When the time between the actual performance and the provided feedback is increased, its utility is decreased (Crooks, 1988).

Rowntree (1977) points out the various forms and degrees of usefulness of feedback, and notes that in its least useful form it comes as a mark or grade. A 45% or a 'C' may give the pupils some hint as to whether or not their teacher thinks they are making progress, and they can compare their grade or mark with those of their previous tests. But it tells them neither what they have done to merit such a mark nor what they could do to get a better one. He believes that feedback is useful when it includes verbal comments.

According to Zahorik (1968), feedback is provided in verbal/non-verbal or written forms. The type of feedback used appears to be a function of the pupils' age level, the purpose of the part of the lesson in which it occurs, and many other factors in addition to the response. When the feedback is really intended to contribute to the pupils' progress, it must tell them either that they have already achieved what they were trying to achieve or else must enable them to take further action towards achieving it (Birney, 1964). Verbal Feedback According to Zahorik (1968), teacher-verbal feedback is a very complex, persistent and pervasive behaviour during the teaching - learning process. It is related to several variables, only one of which is the value of the pupil's response. This behaviour refers to those oral remarks of teachers which reflect on the correctness of the children's 'initiated statements in relation to subject matter development. It includes statements such as 'Fine' and 'O. K'. He also found that his sampled teachers used a wide variety of different types of feedback but only a small number of these were used with regularity. The most frequently used type of feedback was repeating the pupils' answer approvingly. The second most frequently used type was calling on a pupil to enlarge his/her response.

Page (1958) found that simple positive comments are very beneficial and negative criticism is predictably counterproductive. Generally, criticism is more potent than praise for bringing about change. This was the finding of a study which examined the consequences of teacher praise and criticism (Worrall, C. et al., 1983). Negative shift due to criticism was clearly greater than the positive shift due to praise. The place of rewards in school: praise, grades, recognition of progress is crucial, and clearly, they are used as incentives to encourage learning (Child, 1981). Sometimes the inherent interest in some aspects of school work is sufficient to arouse the children to cognitive activity but often it will be necessary to apply external stimuli. Development in the area of extrinsic motivation owes much to findings in reinforcement theory, which has been one of the most researched areas of psychology (Child,

1981; Satterly, 1989). In its simplest form, the theory follows from Thorndike's Law of Effect' which tells us that if our efforts are rewarded with something we like to receive (positive reinforcement), we are more likely to repeat our efforts, and thus habits are born. This is in accordance with Skinner's (1969) basic principle that behaviour followed by positive reinforcement is likely to recur while that which is not is less likely to recur. The use of tangible reinforcers such as 'stars', prizes, money or gifts is not new in primary schools. Consequently, several programmes have been devised which begin with external rewards of one kind or another and become transferred to cheap re-enforcers (Child, 1981). Although most educational psychologists stress the value of reinforcement of good behaviour or successful performance, and point to teacher praise as a valuable and desirable form of such reinforcement, Brophy (1981) drew results from his study sharply at variance with these common views. His main conclusion was that the meaning and function of teacher praise would depend not only on the verbal content, but on non-verbal accompanying behaviour which could either reinforce or contradict it, and on situation and context factors which condition pupil expectations about and perceptions of teacher behaviour. There is evidence that teacher praise is a weak reinforcer at least after the first few years in school (Kohlberg, 1969). Moreover, children who are low in ability, who come from low socioeconomic backgrounds were more likely to be responsive to praise and encouragement from the teachers. With pupils who happen to be high achievers, praise may not only be ineffective but actually counter-productive (Eden, 1975). Teachers do not have to be indiscriminately positive in their evaluative comments towards pupils but instead to pick their spots and choose their words carefully (Brophy, 1981). Forness (1973) argues that effective praise can provide encouragement and support when made contingent on effort, can be informative as well as reinforcing when it directs the pupils' attention to genuine progress or accomplishment and can help teachers establish friendly personal relationships with pupils. Although it is generally weak as a reinforcer, it is effective to many pupils and has several advantages over material rewards (Schultz & Sherman, 1976).

The extent of the written feedback (general and short; marks or grades or specific comments) and how it affects learning are also of interest to this study. Page (1958) found that pupils who are given individualized verbal comments on their work, incorporating suggestions for improvement do tend to improve significantly more than pupils who are given standard comments. When the average teacher takes the time and trouble to write comments like

"encouraging" on pupils' papers, these apparently have a measurable and potent effect upon pupils' effort, attention and attitude.

There are several research studies supporting Page's (1958) theory that teachers' comments are a worthwhile instructional practice (Tyler, 1958; Campbell & Stanley, 1963; Pickup & Antony, 1968). But there are others who have failed to find consistent support for teachers' comments (Lindgren, 1967; Glock, 1971; Gage & Berliner, 1975; Graig et al., 1975). Stewart & White (1976) presented the results of their own study and reviewed those of twelve others trying to replicate Page's (1958) study of the effects of grades alone versus the effects of teacher comments and grades as forms of feedback. Their conclusion was that the positive effect obtained by Page may depend on the particular learning conditions and the nature of the teacher comments. They suggested that there is no strong evidence to point out that any type of comment retains its effectiveness over an extended period of time and, where comments were effective, they were encouraging and personalised in nature rather than simple standard statements. Written praise has a positive effect but it is considerably more effective when accompanied by specific comments on errors (Cardelle & Como, 1985). This finding confirms the usefulness of teachers' comments on pupils' work. Krampen (1987) suggests that written comments should be content specific and take into account a pupil's concept of his or her own competence otherwise the findings show that the teacher comments produce outcomes which may not be all positive.

Another form of feedback is Non-verbal. This is very feasible in primary schools. Teachers' smiles or scowls have a great influence on the pupils' behaviour. Gesture is the commonest form of non-verbal contact. It includes facial and body movements (Bimey 1964; Argyle, 1978). Jackson & Belford (1965) concluded that teachers continually assess and, as a consequence, change teaching styles and curriculum after close attention to the faces of the children. The joy of teaching came through the light in the eyes of the pupils. That light provided the feedback required for instantaneous re-panning. According to Shipman (1983), much of classroom assessment is instantaneous and spontaneous. Teachers assess through their ability to detect understanding and bewilderment, enthusiasm and boredom, minority and majority understanding. Sometimes it is assessment based on answers given, but it can be through the light in the eyes of the children, the waxing and waning of enthusiasm. As the teacher interprets signs from the children, there is an immediate curriculum development, changes in teaching style, emphasis, speed or topic. Reward and punishment sound very grand terms in the primary school situation, for mostly they are small things like a smile or the

raising of an eyebrow. Nevertheless, their function is important, namely, to enable the teacher to control the behaviour of the children (Roberts, 1983; Child, 1986).

Feedback is a key element in classroom assessment (Sadler, 1989). After studying the assessment results, pupils are provided with feedback information in terms of where, what and how they need to improve or practice. This is a very important issue because it acts as a motivation for further learning as well (Sutton, 1985; Jones & Bray, 1986; Lee, 1989; Gipps, 1990; Thomas, 1990; Airasian, 1996). According to Rowntree (1991), the value of feedback, or 'knowledge of results' is the life-blood of learning. Having said or done something of significance - whether a physical action, a comment in conversation, or an essay in an examination - the pupil wants to know how it is received. He wishes to know whether he communicated what he intended to, whether what he said seemed right or wrong, appropriate or inappropriate, useful or irrelevant to his audience. And he may need a response fairly rapidly if it is to confirm or modify his present understanding or approach.

Effective feedback enables the pupil to identify his strengths and weaknesses and shows him how to improve where weak or build upon what he does best. Research on feedback on learning from classroom teaching has shown that feedback generally increases what pupils learned from reading assignments that included questions or tests for them to answer (Page, 1958; Karraker, 1967-, Beeson, 1973; Strang & Rust, 1973; Ingenkamp, 1986). Zahorik (1968) argues that teacher-verbal feedback is significant instructional behaviour which has a considerable effect on pupils' learning. The verbal feedback that teachers give, following a pupil's behavioural output, provides information for the child relative to the effectiveness of the behavioural output. Using this information, pupils can adjust and change their future output in terms of their goal. One potentially useful way of enhancing motivation and learning may be the placement of comments on pupils' test papers (Leauby & Atkinson, 1989). They noted that comments had a more powerful effect on the pupils at the upper and lower positions of the class.

As for the pupils of middle range, comments had an un-inhibiting effect. Radecki & Swales (1988) found that most of their English as a Second Language pupils reported positive or at least neutral reactions upon receiving a heavily marked paper, whatever the nature of the marking. They declared that they would read the comments and even expressed satisfaction that their teacher had marked their papers. Most of the pupils also reported that they looked first at the grade on their returned paper rather than the comments, implying that initially the grade is of more concern to them. Furthermore, nearly all pupils revealed that they reviewed

their corrected work only once or twice, immediately upon receiving it or before an examination. One of the major benefits from feedback is the identification of errors of knowledge and understanding and assistance with correcting those errors (Kulhavy, 1977).

In most studies, feedback improved subsequent performance on similar tasks (Crooks, 1988). According to Sadler (1989), pupils use feedback to monitor the strengths and shortcomings of their performance, so that aspects linked with success of high quality can be recognised and strengthened, and wrong aspects reduced or corrected. The most effective form of feedback will depend on the correctness of the answer, the pupil's degree of confidence in the answer, and the nature of the task (Block & Anderson, 1975; Phye, 1979; Fredericksen, 1984). It is the comment in conjunction with a letter grade which would be more likely to improve pupil performance (Hammer, 1972; Stewart & White, 1976). However, in the light of the twelve replications of the Page study that Stewart & White (1976) reviewed, they wonder if writing comments on papers would be a worthwhile use of teaching time.

Classroom assessment provides feedback to the teachers as to whether the learning objectives have been reached (Jones & Bray, 1986). Teachers also get feedback about how well they have taught and they can plan their teaching and remedial activities on the basis of that feedback (Black & Broadfort, 1982; Sutton, 1985; Sadler, 1989; Wilson, 1989; Gipps, 1990; Airasian, 1996). According to Rowntree (1991), as the assessment data reveal strengths and weaknesses in the pupil's learning, the teacher is able to identify where he has failed to explain a new concept, confused an issue or given an insufficient practice. Knowing where and how his pupils have had difficulty may enable him how to teach so as to remedy the situation. Results of individual children can provide feedback to the teacher about the child's progress and teacher's success (Black & Broadfort, 1982; Satterly, 1989-, Gipps, 1990).

Frequent information about pupil performance is used as a basis for the design of teaching materials (Glaser, 1971; Lee, 1989; Thomas, 1990). There are many reasons which are identified for assessment. On the one hand, assessment is for gathering information about a wide range of pupil characteristics as feedback for making decisions while, on the other hand, it is to provide information from which teachers can obtain insights into their effectiveness (Harlen, 1978). Rowntree (1991) found that frequent grading and comprehensive assessment of pupils' work provide feedback information to the pupils as to how well they are doing in relation to others and in comparison, to their own past performance. Sadler (1989) indicates that feedback helps pupils to develop self-assessment skills, if the teacher provides detailed remedial advice and the pupils follow it through. This, however, maintains the learner's

dependence on the teacher. The alternative approach is for pupils to develop skills in evaluating the quality of their work, especially during the process of production. The transition from teacher-supplied feedback to learner self-monitoring is not something that comes out automatically. Bennet et al (1984) emphasise the importance of feedback that highlights what a pupil can do to remedy unsatisfactory results.

However, this is a skill which many teachers find difficult because of the large numbers of children they teach, their own unfamiliarity with formative assessment approaches and the restrictions of time and resources. Crooks (1988), stresses that feedback in the form of global grades has little effect on subsequent performance. Instead of the vague criteria that teachers frequently use, pupils need clear and explicit performance criteria which explain what they are expected to do. He also points out the significance of feedback in improving learning through the affective domain.

Educators who work on developing a better use of feedback suggest that to get the best results of the situation the learner has to possess a concept of the standard being aimed at compare the actual level of performance with the standard and engage in appropriate action which leads to some closure of the gap (Sadler. 1989). Schunk (1984), suggests that with performance feedback the emphasis should be on informing pupils about their progress in mastery rather than on social comparisons. This is crucial for the less able pupils who might otherwise receive little positive feedback. Teachers need to be knowledgeable about the effects of various types of feedback and should consciously provide appropriate criticism.

Black et al. (1989) suggest that teachers always have to provide maximum feedback to children about their assessments, by relating subsequent teaching to those assessments or by making clear which qualities have been discerned and achieved and where effort is still needed. Sadler (1989), opines that the main purpose of feedback is to reduce discrepancies between current understandings and performance. This equates to the three functions of feedback outlined by Hattie and Timperley (*op. cit.*), namely “feed-up”, “feed-back and “feed-forward”.

Kluger and de Nisi (1996), conducted among the most comprehensive review, based on 131 studies, over 12,000 participants, with an average effect of 0.38, noting that about a third of the effects were negative. More specifically, in the classroom domain, Hattie and Timperley (2007), Hattie (2009), and Hattie and Zierer (2019), conducted meta-syntheses relating to the effects of feedback on student achievement (which we refer to as Visible Learning research). These indicated a high effect (between 0.70 and 0.79) of feedback on student achievement in

general. However, the authors noted the considerable variance of effects, identifying those forms of feedback as powerful that aid students in building cues and checking erroneous hypotheses and ideas, resulting in the development of more effective information processing strategies and understanding (Hattie and Timperley, 2007).

Given the impact of the Visible Learning research (over 25,000 citations on Google Scholar), it is important to ask whether the results presented on the effectiveness of feedback and the variables which moderate this effectiveness will stand up to scrutiny. A comprehensive meta-analysis on educational feedback which integrates the existing primary studies is still a desideratum. Hattie and Timperley (2007), made basic assumptions with respect to variables that moderate the effectiveness of feedback on student achievement. The type of feedback was found to be decisive, with praise, punishment, rewards, and corrective feedback all having low or low to medium effects on average, but corrective feedback being highly effective for enhancing the learning of new skills and tasks. With regard to the feedback channel, video/audio and computer-assisted feedback were compared. For both forms, the synthesis showed medium high to high effects. It was also noted that specific written comments are more effective than providing grades. Hattie and Timperley (2007), also investigated the timing of feedback (immediate/delayed) and the valence (positive/negative feedback), reporting inconsistent results. It was proposed that forms of feedback with a lack of information value have low effects on student achievement.

The setting and marking of official examinations is also a factor for determining teaching experience. Teachers must have some specific qualities to make sure that their ability to fulfil the task of constructing Examination is good. Due to its importance the different qualities of a “Test Constructor” have been defined by educationists, scholars and educational institutions. The figure below illustrates the “Qualities of the Test Constructor”.

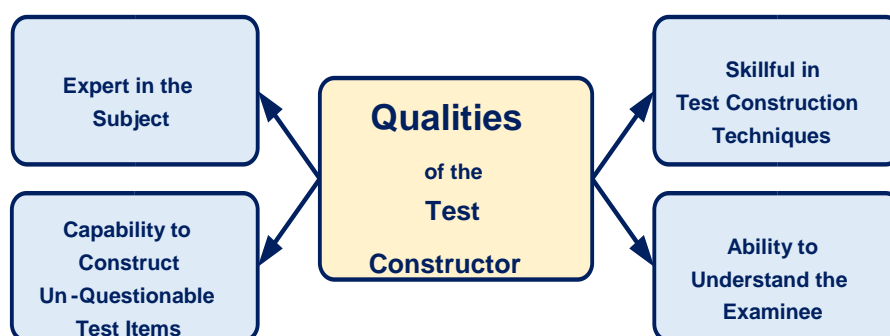


Figure 3: Qualities of the Test Constructor.

The most common “Qualities” of a Test constructor which have been emphasized are:

- 1) The expertise in the subject matter with having mastery in Course/Subject contents,
- 2) Skilful and Proficient in Test Construction Techniques with knowledge about various test patterns,
- 3) Ability to understand the level of the examinee and should be well informed about the medium of Teaching and Learning process, and create definite test items accordingly, and
- 4) Capability to construct un-questionable Test items i.e. having mastery of language, subject capability to construct un-questionable test items skilful in test construction techniques and the ability to understand the examinee.

According to Kilpatrick, et al (2001), markers have to be aware of how questions are constructed, how their solution is represented and even how to solve specific problems. A marker can therefore identify the features in the learners' response that can possibly be similar to the features in the mark scheme.

Suto, Crisp & Greatorex (2008), opines that the core process of marking requires a marker to read the students' responses and utilize five cognitive strategies in order to assign a mark. The cognitive strategies according to Suto et al (2008), are matching and no response, scrutinising, evaluating and scanning. They also added that the marking process is influenced by a number of factors, namely: markers' subject knowledge, markers' teaching and marking experience as well as the examining and the teaching community.

Apart from making sure that a clear marking scheme is available, for national examinations, chief examiners together with the team leader have to make sure that markers are properly trained on how to apply the mark scheme. They also continuously monitor the marking process by moderating the scripts marked by other markers at random (MoE 2007(a)). Having a clear mark scheme and a proper moderation system enhances reliability and fairness. Usually, the first day of marking is used mainly for markers' training which is done in teams by the team leaders (Chief examiners).

The team leaders together with their team of markers discuss the marking scheme to make sure all possible answers are included. This process is called a standardisation meeting. The purpose of a standardisation meeting is to make sure a common understanding of the

requirements of the mark scheme is found (MoE, 2007 (c)). It is essential for all the markers to attend the standardisation meeting. After a common agreement has been reached on how to apply the mark scheme, markers are requested to mark a given number of dummy scripts and discuss them in their teams with the team leader in order to eliminate all misinterpretations of the mark scheme before the 'life' scripts are marked. The moderator assesses the scripts, discusses the errors with the respective markers in order to provide feedback and to reinforce understanding and application of the mark scheme. This process is meant to ensure that the markers do not repeat the same mistakes as they continue marking. This process continues until a total of 20 'life' scripts are marked and moderated. The markers are then allowed to mark a given number of scripts per day (a daily quota).

The daily quota is calculated to make sure that all markers complete marking the number of scripts assigned to them on the prescribed time. The moderators continue picking scripts at random for moderation until the marking process ends. The moderators are required to assess at least 10% of the total scripts marked by each marker. However, the moderator can moderate up to 15% of the scripts marked by poor markers (Mutuku, 2008). In other words, poorly performing markers are expected to have more moderated scripts than the better performing markers. All moderated scripts are recorded in a form called a moderation record form. Each marker's moderated scripts are recorded on one moderation record form. Errors in marking examination commonly occur because of misinterpretation of how to apply the mark scheme (MEC, 2001). Lack of concentration has also been known to cause several errors in marking. Njabili (1993), stated that markers may lack concentration because of stress, exhaustion and side-tracked by anything else during marking. She further recommended that marking should not be done under mental stress. Consistence in the application of the mark scheme is known to be the biggest issue that may lead to a number of errors in the marking (MEC, 2001).

Some errors however, could happen in mechanical procedures such as adding marks within a question and or the total of a learner's answer sheet. Such errors are always minimised, if not eliminated. Every marker's work is supposed to be checked for addition by a partner marker for mechanical errors, like adding errors. When a (teacher) marker learns marking procedures through understanding, they are more likely to remember the procedures and less likely to make mistakes in their marking. Leinhardt and Smith (1985), are of the opinion that more experienced teachers are more fluent in their instructional routine. This includes the way they

assess their learners and how they use assessment in enhancing the instruction. This should also include making accurate judgments not only of assessment at school.

A teacher (marker) should be able to understand why a student's response to a test or examination question is the correct answer and what makes it correct, i.e. what the number, solution, or result represents (Kilpatrick, Swafford and Findell, 2001). If a particular response is not correct, a teacher (marker) should be able to figure out where the student went wrong and be able to assist where possible.

Crisp & Greatorex (2008), states that a marker is involved in a succession of mental processes when correcting scripts. A marking exercise should be seen by each marker as part of learning and should learn through different features of learners' response be it correct or not, so that they can continuously improve on their own practice.

Classroom assessment is used to raise learners' achievement and is an integral part of assessment for learning, which is an extension of formative assessment. Assessment for learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there. It should be on going and part of effective learning and teaching. It is based on the principle that students will improve most if they understand the aim of their learning, where they are, in relation to the aims and how they can achieve it.

Hattie (2008) argues that, "Formative assessment is vital in quality teaching and teachers should constantly be using evidence to reflect on the impact their practice had on their learners."

Hattie says, "Assessments are more for teachers than students; they are for you to find out what you taught well and to whom." Hattie argues that this reflective, evidence-based mindset, "Captures the essence of what educational research concludes as a high-impact on achievement." Hattie says, "Teaching is to D.I.E: Diagnose what they do/don't know, Intervene and Evaluate the impact."

Marking is an essential tool that verifies on the learning that has taken place. It should be clear, appropriate feedback about the strengths of their work and areas for development. Marking enables teachers to make judgements about their learners' attainment, keyed into national standards. It develops and refines teachers' understanding of progression in their subject, provides diagnostic information about the strengths and weaknesses of individual

learners and groups of learners. It enables teachers to track learners' progress over time, informs curriculum planning and facilitates the setting of meaningful curricular targets that can be shared with learners and parents. A strong focus should be on progression/improvements/acting upon advice. This is a particularly important approach in the light of assessing without levels reforms. Targets can be set based on accurate diagnostic assessment of students' weaknesses. Progress must be made very clear to the teacher, the students and external observers. Learners should be given constructive advice on how to improve. They need information and guidance in order to plan the next step in their learning.

Marking is more than just tick marked. Ticks that are given should clearly tie in with valid points connected to the question. Constructive comments are the most effective forms of marking and allow learners to recognise their own strengths and weaknesses. Teachers should be aware of the impact that comments, marks and grades can have on learners' confidence and enthusiasm and should be as constructive as possible in the feedback that they give. Comments should focus on the work rather than the student. Marking should be immediate to be of benefit to both the teacher and the learner. All marks, levels/grades need to be kept as accurate records in an appropriate record book. Grades and levels that are recorded should follow department guidelines which in turn reflect the common report criteria of: Excellent, Good, Satisfactory, Poor and Unacceptable.

A variety of assessment techniques are used on learners' work such as, comments only, self/peer assessment focused and close marking when appropriate. Peer and Self-assessment strategies are important components of classroom assessment. Sadler (1989) emphasizes the importance of student understanding of what constitutes quality work, "The indispensable condition for improvement is that the student comes to hold a concept of quality roughly equivalent to that held by the teacher..." (p. 121). Yet, conveying to students the standards and criteria for good work is one of the most difficult aspects of involving them in their own assessment. The primary goal of the assessment practice is that pupils should be able to assess themselves and to pursue new goals. Shipman (1983) argues that self - assessment has profound implications for teaching and learning style, since a commitment to share with children responsibility for learning suggests the adoption of classroom practices which embrace the ideals, goals and principles of self - assessment and encourage teachers to develop skills in participant observation rather than didactic skills. This was the main idea of the Records of Achievements (RoAs) in which pupils take more control of their own learning, set targets for themselves, actively assess their own achievements and thus become more

confident, responsible, adaptable and able to work as part of a team. RoAs have also required teachers to abandon some of their authority and undertake cooperative enterprises with the pupils (Broadfoot et al, 1990).

Towler & Broadfoot (1992) explain that the process of self-assessment is likely to lead to a positive influence upon teaching style and management in creating a more truly democratic partnership between teacher and pupils. According to them, a coherent policy of self-assessment helps children to develop powers of reflection and self - criticism, encourages motivation by giving responsibility to children for their learning and by implying that their opinions matter. As far as the rationale of self-assessment is concerned, they point out that involving children in the assessment process is a natural extension of the child centred approach towards learning characteristics. Reflection and evaluation can encourage understanding of what is expected, improve motivation, lead to pride in positive achievement and offer a realistic appraisal of weaknesses. Again, teachers can use various ways to help students develop and cultivate these insights, which may include training them on the appropriate skills of assessment. Sharing of exemplar materials allow students to see what success looks like and therefore can share in the learning process.

It is important to improve students' self confidence in self-assessment and help them, with the teacher, to set future targets for the 'next steps' in their learning. Student participation becomes a key component of successful assessment strategies at every step: clarifying the target and purpose of assessment, discussing the assessment methods, deliberating about standards for quality work, reflecting on the work. Sharing assessment with students does not mean that teachers transfer all responsibility to the student but rather that assessment is shaped and refined from day to day just as teaching is. For student self- and peer-assessment to be incorporated into regular practice requires cultivation and integration into daily classroom discourse, but the results can be well worth the effort. Black and Wiliam (1998a) assert, "...self-assessment by the students is not an interesting option or luxury; it has to be seen as essential" (p. 55). The student is the one who must take action to "close" the gap between what they know and what is expected (Sadler, 1989). A teacher can facilitate this process by providing opportunities for participation and multiple points of entry, but students actually have to take the necessary action.

Marking of written work is universally practiced with the emphasis on doing it collaboratively, with the students, to give personal reinforcement and encouragement, In this way, thus initiating students into a kind of self-assessment.

Examination is an integral part of teaching and learning; therefore, it is imperative for every teacher to have a clear understanding of the purpose of examination (Wragg, 2001; Webb 1992). Every teacher should therefore be able to clearly set examination items that are valid and reliable and should also be able to understand what the examination is expected to achieve.

To ensure consistent assessment, the examination items must be constructed to an appropriate quality (MESC, 2001; Wragg, 2001). Experience shows that judging the quality of items can be complicated but, as a starting point, teachers should consider the difficulty level of the items. In general, a good assessment ought to be at about the difficulty level of the average learner (MESC, 2001). Also, consider how well the assessment differentiates between the learners. To provide maximum information, the assessment ought to separate the learners as much as possible (MESC, 2001).

Wragg (2001) defines marking assessment as a way of setting boundaries by assigning grades and categorizing the learners' assessment responses as being right or wrong. Teachers perform the marking of assessment and therefore it is part of the teacher's practice (Kilpatrick, Swafford and Pindell, 2001).

In a review of the literature, Hoge & Coladarci (1989), combined the results of empirical studies conducted over a number of years. Their findings suggested a sensible and strong connection between teacher judgments and student achievement. Given the significant role of teacher judgment in assessing students' academic achievement, a number of studies have examined the accuracy of these perceptions (Hoge & Coladarci, 1989). In their study Suto Crisp & Greatorex (2008), indicated that the core process of marking requires a marker to read the students' responses and utilise five cognitive strategies in order to assign a mark. The five cognitive strategies highlighted by Suto, Crisp & Greatorex (2008), are matching and no response, scrutinising, evaluating and scanning.

They also added that the marking process is influenced by a number of factors namely;

- Markers' subject knowledge,
- Markers' teaching and marking experience
- The examining and the teaching community.
- Marking task demands
- Specific question and mark scheme features and
- Candidate response features

Experience shows that when a candidate's response includes features that are different from the mark scheme features of a specific question, although giving the same interpretation; some markers may not make the correct judgment. In another study Nadas & Suto (2008) have found that a marker's subject knowledge, teaching and marking experience have a great influence on a marker's self-confidence during the marking process.

There are therefore many factors that influence the way teachers' judge and mark the learners' responses in the national examination. Wragg (2001) has also highlighted that when teachers are marking assessment they are influenced by "their mental state about particular learners" (p.23). In particular, he further emphasised that the level of teachers' mathematical knowledge is a major influencing factor of teachers' judgment of learners' responses.

I believe that the accuracy and the validity of information obtained from assessment depend critically on how accurate the judgment of the marker is. In addition, Kilpatrick, Swafford and Findell (2001) emphasised that the more accurate the information obtained from the assessment process are well-coordinated to the curriculum goals, the better it serves its purpose. Therefore, teachers' ability to make accurate judgments of learners' responses and the clear interpretation of assessment result is crucial for effective teaching and learning.

Marking assessment tasks is an important part of teachers' practice, including national examination marking. In their study Suto, Crisp & Greatorex (2008) have summarised that the learners' response features and mark scheme features have a great influence on the affective reaction of a marker. Thus, marking assessment requires a very high level of reflection on the learners' response and the teachers' actions towards those responses is vital. In other words, for teachers to give meaning to procedures, they should understand the concepts underlying procedures. They should then be able to see that a certain procedure is correct, relate it to other procedures that they already understand and use the concepts and procedures in making judgments (Ball, 1989; Fennema & Franke, 1992; Shulman, 1986).

For teachers, marking provides the opportunity to work with experienced Senior Examiners and to gain an understanding of what they look for in candidate responses. Examiners will see hundreds of responses from different students at different schools which may, in turn, improve their approach to teaching the subject in the future. We aimed to address the barriers to teachers taking part in marking and support them to become examiners by running an in-house marking pilot with a Multi Academy Trust.

Observation of individuals and small groups stood out as the major domain of innovation in assessment practice and teachers were found to be making this more formalised than before. Although it was found that assessment was implemented in a more structured, disciplined and accountable way, nearly all the teachers noticed its undesirable effects; it was time-consuming and was regarded as amounting to a bureaucratic paper-pushing operation. Overall, they found a much greater emphasis on assessment and record-keeping, some considerable resentment as the time demands and perceived unnecessary formalisation of much of it; fears about the potential impact of such pervasive assessment and recording on the teaching-learning process, relationships with parents and the pupils themselves.

Osborn and Broadfoot (1994), report that the English infant teachers remain individualistic in their Outlook, basing much of what they do and believe on personal experience rather than on generalised knowledge and practice. Nias (1989), has referred to such teachers as being theoretical and school bounded. According to Broadfoot et al. (1991), the critical role of validity if the assessment is to be at all useful and meaningful should be recognised. They went on to comment that teachers are being required to face up to the critically important role of assessment in monitoring systematically the progress and learning needs of each pupil. Each assessment technique has its particular strengths and weaknesses. It is vital for teachers to choose an assessment approach that is best fitted for providing the kind of information required.

According to Rowntree (1991), the decision sometimes will be taken in advance. What questions to ask, whether or not to set a test or a task. Sometimes it will be an "on-the-spot" decision, whether or not to pay heed to a particular event as a source of assessment data. Either way, whether planning assessment events or admitting those that have "just happened", what criteria do we apply? First and foremost, we must apply criteria of educational relevance. For instance, does a particular assessment method seem to "go with" the content and style of the teaching and learning expected by our pupils? Satterly (1989) notes that it is difficult to choose which of several apparently conflicting modes of assessment best reflect the educational intentions of teachers and schools or which combination best serves the evaluation of the attainment of educational objectives. Frith & MacIntosh (1984) propose that teachers selecting the appropriate assessment technique must bear in mind: the purpose for which the assessment is to be undertaken; availability of time and resources, age and ability of pupils. They suggest a balance for the combination of information obtained from the use of several techniques. Overall, the practices teachers' use most often every day in the classroom,

correspond to the practical needs they face and the routine tasks they must carry out. Further, in all these activities and making choices antecedent to them, teachers become themselves practical reasoners and decision makers in their everyday profession (Dorr-Bremme, 1983).

In general, the above evidence shows that many teachers rely upon and trust their personal interactive experience with children in the classroom. They tend not to trust the results of one test or one assessment approach, without reference to everyday teaching evidence. As McLean (1985) points out, evaluation is more craft than a profession; teachers measure and evaluate more through a 'folk knowledge' than from a theoretical and practical base. Several researchers (Anderson, 1989; Brown, 1991) suggest building on good current practice. Broadfoot (1979) examines the way assessments are implemented by shifting the focus from the actual assessment practices to the predominance of concern about techniques at the literature which is confirmed by disputes about the accuracy of formal examinations, the advantages and disadvantages of objective tests, the potential of item-banking, the relative merits of various moderation and scaling techniques, the sophisticated statistical procedures being developed for fixing discrimination and facility values and the debate over the desirability of continuous versus point in time assessment. The focus of such discussion is on examining current practice and working out how it may be changed to become more efficient and manifest fairer. The importance of this is compounded by the effects of the use of particular assessment techniques (Broadfoot, 1979).

An HMI report (1990) emphasises the role of teacher assessment in the context of ongoing classroom interaction and not just referring to written products, that is, good assessment practice involves a carefully balanced combination of observation, questioning, discussion and marking. For example, practical work gives the opportunity for questioning and discussion. Questioning helps children to learn and their responses provide evidence of the depth and quality of that learning.

Marking policy is personalised for every subject and has to be regularly reviewed, to ensure consistency of marking within a department, while maintaining the international norms. In the corrections of classroom assessment, all the students have the right to marking criteria and Subject level/grade criteria. Learners need to have some part in deciding goals and identifying criteria for assessing progress within levels or reaching the next level/grade. Communicating assessment criteria involves discussing them with learners in terms that they understand and by providing examples how the criteria can be met in practice. When marking work from

learners with specific learning difficulties, it may be helpful to use a form of short hand e.g. CFC (Come for a chat).

The five-minute Check through a cross-section of books, about 10 books to assess how students across a range of abilities performed in the previous lesson. If they have produced a piece of writing, begin the next lesson by showing an example from one student (or small group) typed up or photographed or projected on a visualiser and critique it together. Guide the class through the editing process, staying focused on common misconceptions and weaknesses, so that modelling an improvement is done together. Individuals then return to their own work and edit independently with this example in mind. Focused marking chooses a specific learning point, skill or technique. Inform students that the assessment of their work will be based only on the teaching point. Marking has to tie with the learning objective, notes making and summarising. Students create their own notes and get feedback on their efforts e.g. by comparing their notes with a model. A mixture of both individual and collective feedback is the most effective approach, given the constraints of time.

2.1.3. Concept of class size

The class unit is the basic unit of organisation for instruction, it is therefore imperative that class size information be studied in greater details. According to Ronald (2001), class size refers to the actual number of learners taught by a teacher at a particular time. This number of students could be large or small. Tambo (1989) defines class size as the number of students each teacher is officially assigned to teach. In Cameroon, the allowable number of students per class may be more due to some factors (number of students attending school, inadequate infrastructures, among others). This study considers plethoric classes as typically the ones marked by a large student teacher ratio (STR) as compared to the official number allowed per class (60:1).

Class size is the average number of students per class, calculated by dividing the number of students enrolled by the number of classes. According to Wikipedia, class size refers to the number of students a teacher handles during a given period of instruction. According to Encyclopaedia of Education class size is the number of students in a class whom the teacher is responsible and accountable for. It refers to the number of students in a given course or classroom, specifically either the number of students being taught by individual teachers in a school, district, or educational system. The term may also extend to the number of students participating in learning experiences that may not take place in a traditional classroom setting

or it may also refer to the number of students participating in grade level or class in a school. Class size, according to Blatchford, Moriarty, Edmonds, & Martin (2002) is a very important environmental factor that influences teachers and pupils in a number of ways, however, the other contextual factors should not be ignored. In the same vein, Mulryan-Kyne (2010), argues that there are several factors that should be considered as relevant such as the nature of the programme or course being taught, the accommodation and facilities that are available and the resources needed. For example, meeting the needs of a class of 50 in a science laboratory designed for 30 is likely to be more challenging than presenting a history lecture to 220 students in a lecture room designed for 200.

Early Research on elementary school students, small classes usually mean fewer than 20 students, while for high school students the definition of “small” classes is usually somewhat larger. There are similar variations in what constitutes small classes for college writing instruction. In addition to the ambiguity about how many students constitute a smaller class, researchers use different strategies for assigning a class-size number. It can mean the number of students enrolled in the course, the number of students completing the course, or the number of students completing major course assignments (Arias & Walker, 2004). Normally schools, delegations (regional and divisional) and educational agencies commonly track and report average class sizes. According to England Report (2011), class size is the number of pupils in a class with one teacher.

In recent decades, a variety of reforms have been focussed on decreasing class size or the average class size in an educational system, as a strategy for improving school and student performance. Research has shown that smaller class sizes could have positive effects on student learning and achievement. The idea of reducing class size lies on the rational that if teachers have fewer students, they can devote more time and attention to each student, including more time diagnosing specific learning needs, critiquing work products and giving students one-on-one instruction and academic support. Average class size can be reduced in a variety of ways. The two main approaches have been through educational policy and funding mechanisms, and by reconfiguring the organisational and instructional systems in a school. An alternate way, to reduce class size is to use a variety of instructional-and school-configuration strategies broadly known as small learning communities. While many different school designs and teaching methods are used to create small learning communities within new or existing schools, the general goal is to increase the amount of one-on-one attention,

personalised instruction or academic support for students. In small learning communities, students are paired with teachers, counsellors and support specialists who, over time, get to know the students and their specific learning needs well as enabling them to educate the students more effectively. Though the average student-teacher ratio in a school may or may not change in small-learning-community settings, students will be grouped and supported in ways that can potentially reproduce the benefits of smaller class size.

While reducing class size and the attendant professional burdens placed on teachers, seem to be a logical way to improve the amount of instructional time and attention given to each student, research studies have found mixed results: some indicate that smaller classes have produced educational benefits for students, but others suggest that strong teaching is the main factor, and that simply hiring more teachers—who may not necessarily have more experienced and skilled teachers—will simply increase educational cost without producing the desired results. In the on-going debate about class size, cost turns to play a significant role. Critics of lower student-teacher ratios may argue that an effective teacher can teach a larger class of students better than an ineffective teacher can teach a smaller class, and therefore the benefits do not justify the increased costs. There is the on-going debate over the precise point at which students begin to benefit from smaller classes. Some evidence suggests that lowering class sizes may not have a positive effect on students' achievement until the average size drops below 20 students. Research on class size is interesting because there is no specific class size universally accepted.

Different from the American counterparts, the British government argued that students' academic achievement hinged on teacher quality rather than class size; therefore, studies about class size reduction in Britain tended to focus on different aspects (Bennett, 1996; Graue et al., 2005; Hall & Nuttall, 1999). The most complete British analysis of educational consequences of class size reduction was conducted by Blatchford and colleagues between 2000 and 2003 (Blatchford et al., 2003). The study aimed to investigate the effects of class size differences on the academic achievement of students aged 4-7 (junior Kindergarten to second grade), and to understand the connections between class size and classroom processes. The researchers followed a cohort of 10,000 pupils aged from 4 to 7 years for three years. Schools were selected randomly and reflected the diversity in the general population with regard to social background, ethnicity/race, and geographic location of schools in terms of urban, suburban, and rural areas. A variety of information was collected, including child,

school and teacher characteristics; academic attainment (measured using Avon Reception Entry Assessment); class grouping practices; teacher estimates of time allowed for teaching; systematic observation of classrooms and teacher experiences of class size; case studies of selected small and large classes; and Pupil Behaviour Ratings (PBR). The results showed that there was a clear effect of class size differences on children's academic attainment over the (first) Reception year.

In the case of literacy, the lowest attainers on entry to school benefited most from classes with less than 25 pupils. In terms of the relationship between class size and classroom processes, researchers found that smaller classes allowed more individual student-teacher interactions, more support for learning, and easier classroom management; at the same time, there was increased student inattentiveness and off-task behaviour in larger classes. Results supported a contextual approach to classroom learning within which class size differences had effects on both teachers and students. Researchers concluded that much would depend on how teachers adapted their teaching to different class sizes.

Mill and Alexander (2013), define 'small class teaching' as any teaching situation in which dialogue and collaboration within the group are integral to learning. Han in Tang (2013), adds that 'small class teaching refers to reduce the unit number of classes, that is reducing class size, increasing the proportion of teachers and students, which make the teachers put more effort for each student, thereby effectively improving quality of education and student achievement'.

2.1.4. Concept of Teacher Motivation

Specific goals, teacher voice, and self-efficacy may be a further source of intrinsic motivation for teachers. Loscke (1966 cited in Johnson, 2006) finds that goals that are specific, challenging, formed through employee participation and reinforced by feedback are those that most motivate employees. In the developing world, goals are often not so clearly defined and usually not determined in a participatory process incorporating teacher feedback. In terms of self-efficacy, or one's belief in their ability to realize goals, Bandura's (1966) social cognitive theory holds that self-efficacy is an important determinant of motivation. According to Bandura, self-efficacy is a product of four components: physiological and emotional well-being, verbal encouragement from others, learning from one's own experience, and learning from others' experiences. These four components of self-efficacy are strongly related to

Maslow's hierarchy of needs and the interplay between extrinsic versus intrinsic sources of motivation.

Against this largely theoretical backdrop, empirical studies of teacher motivation in developing countries paint a dismal picture of generally low or declining levels of motivation among formal public-school teachers. However, the situation varies from country to country. Some countries may face particular threats to teacher motivation while other countries face different or no threats at all. For example, Michaelowa (2002), finds that in Burkina Faso, Cameroon, Cote d'Ivoire, Madagascar, and Senegal; more than 50% of fifth grade teachers seem to prefer teaching to any other profession, and over 40% like their schools and do not want to change, indicating that teacher motivation may not be so bad in those countries. Ethiopia and Nigeria on the other hand, exhibit nearly all of the causes and symptoms of low teacher motivation. Traditional incentive plans designed to recruit, reward, and retain teachers include: Merit pay and career ladders intended to provide financial incentives, varied work, and advancement opportunities for seasoned teachers. These, along with across-the-board pay raises, work environment premiums for difficult assignments, and grants or sabbaticals for research and study, were expected to improve teacher performance and motivation.

According to Johnson (2006), measures developed to boost teacher motivation are based on three theories of motivation and productivity:

1. Expectancy theory. Individuals are more likely to strive in their work if there is an anticipated reward that they value, such as a bonus or a promotion, than if there is none.
2. Equity theory. Individuals are dissatisfied if they are not justly compensated for their efforts and accomplishments.
3. Job enrichment theory. Workers are more productive when their work is varied and challenging.

The first two theories are justification for merit pay and career ladders, and the third suggests differentiated staffing, use of organizational incentives, and reform-oriented staff development.

The idea of merit pay has a straightforward appeal: it provides financial rewards for meeting established goals and standards. The concern is that merit pay plans may encourage teachers to adjust their teaching down to the program goals, setting their sights no higher than the standards (Coltham 2002). Odden and Kelley (1999) reviewed recent research and experience and concluded that individual merit and incentive pay programs do not work and, in fact, are often detrimental. A number of studies have suggested that merit pay plans often divide faculties, set teachers against their administrators, are plagued by inadequate evaluation methods, and may be inappropriate for organizations such as schools that require cooperative, collaborative work.

While merit pay plans attempt to reward excellent teacher performance with increased financial compensation, career ladders such as mentor teacher and master teacher programs and differentiated staffing reforms are designed to enrich work and enlarge teachers' responsibilities.

However, many of these programs have faltered for largely the same reasons that merit pay plans have failed; unanticipated costs, teacher opposition, inadequate evaluation methods, and dissension (Freiberg, 2004). Merit pay and other incentive policies gained legislative popularity largely because of their seeming simplicity. They were meant to provide external incentives, such as, financial rewards, advancement opportunities, workplace variety, but did not adequately resolve the problem of teacher satisfaction. Frase (2002) offers one reason why measures relying on external rewards have been insufficient. There is overwhelming research evidence, he says, that teachers enter teaching to help young people learn, that their most gratifying reward is accomplishing this goal, and that the work-related factors most important to teachers are those that allow them to practice their craft successfully.

Frase identified two sets of factors that affect teachers' ability to perform effectively: work context factors (the teaching environment, and work content factors (teaching). Work context factors are those that meet baseline needs. They include working conditions such as class size, discipline conditions, and availability of teaching materials; the quality of the principal's supervision; and basic psychological needs such as money, status, and security. In general, context factors clear the road of the debris that block effective teaching. Even the most intrinsically motivated teacher will become discouraged if the salary doesn't pay the mortgage. But these factors may not have an extended motivational effect or lead to improved teaching. For example, a survey conducted by Michaelowa (2002) found that teacher

compensation, including salary, benefits, and supplemental income, showed little relation to long-term satisfaction with teaching as a career. According to Frase (2002), content variables are the crucial factor in motivating teachers to high levels of performance.

Furthermore, work content factors are intrinsic to the work itself. They include opportunities for professional development, recognition, challenging and varied work, increased responsibility, achievement, empowerment, and authority. Tundo-Craig (2002) argued that teachers who do not feel supported in these states are less motivated to do their best in the classroom.

Duflo, Dupas and Kremer (2007) confirmed that staff recognition, parental support, teacher participation in school decision making, influence over school policy, and control in the classroom are the factors most strongly associated with teacher satisfaction. The study conducted by Finnigan and Gross (2007), concurred that most teachers need to have a sense of accomplishment in these sectors if they are to persevere and excel in the difficult work of teaching. Ginsburg (2009) studied work content factors in a questionnaire administered to 75 secondary school teachers. They identified three major areas that relate to teachers' job satisfaction, which include:

- i. Feedback is the factor most strongly related to job satisfaction, yet teachers typically receive very little accurate and helpful feedback regarding their teaching.
- ii. Autonomy is strongly related to job satisfaction for many, but not all teachers. Autonomy is not necessarily defined as freedom from interference in the classroom; rather, the majority of teachers view autonomy as freedom to develop collegial relationships to accomplish tasks.
- iii. Collegiality is also important for teachers. Collegiality can be expressed through experiencing challenging and stimulating work, creating school improvement plans, and leading curriculum development groups.

Colthan (2002) and Michaelowa (2002) studies on teacher motivation in developing countries indicates widespread low or decreasing levels of motivation, resulting in lower quality of education. For example, sizeable percentages of primary school teachers are poorly motivated in Sub-Saharan Africa and South Asia. The documented causes of low teacher motivation, referred to as threats to teacher motivation in this study can be divided into eight interconnected categories:

1) Workload and Challenges: There are increasing classroom challenges and demands placed on teachers, but the following seven motivational support teachers need to face are decreasing or stagnant. Remuneration and Incentives: Teacher salaries are generally low and irregularly paid.

- Recognition and Prestige: Social respect for teachers has dropped in many countries.
- Accountability: Teachers often face weak accountability with little support.
- Career Development: Teaching is frequently a second-choice job with few opportunities for professional development.
- Institutional Environment: Teachers face unclear and constantly changing policies as well as poor management.
- Voice: Teachers rarely have an opportunity for input into school management and ministerial policies.
- Learning Materials and Facilities: Teachers have few or poor learning materials and poor facilities

The first category, workload, serves as the backdrop against which the seven remaining categories operate.

The seven motivational supports are divided into two types; extrinsic and intrinsic. Those motivational supports which are largely extrinsic concern teachers' external conditions and material incentives. And those motivational supports that are largely intrinsic, effecting teachers' internal feelings of esteem, achievement, and purpose.

To them those teachers faced with heavy workloads need sufficient motivational support in order to sustain their effort and professional conduct on the job. If teachers' workload is greater than teachers' motivational supports, teacher motivation is threatened. Expanding access to education for all, as many countries are attempting, increases the workload and challenges faced by teachers. Education for all, combined with population growth, often requires remote deployment of teachers, large class sizes, multiple teaching shifts, or multiple grade levels within a single class. Michaelowa (2002) finds that these challenges are negatively correlated with teacher job satisfaction and positively correlated to absenteeism in Africa. Furthermore, due to political influence and irrational policies, it is the least qualified teachers who are most often sent to the most challenging and neediest schools, frequently those located in rural areas (Bennell & Akyeampong, 2007).

According to Reeve, (2014), Teacher motivation involves the desire to teach and one's interpersonal style toward students while doing so. A teacher's own personal motivation revolves around the extent of psychological need. Satisfaction experienced during the act of teaching, and it manifests itself in terms of teacher enthusiasm and job satisfaction. A teacher's motivating style toward students revolve around what teachers say and do during instruction to motivate students to engage in learning activities, and it manifests itself in terms of autonomy-supportive versus controlling teaching. Because there are meaningful benefits to both students and teachers when teachers give autonomy support, we first identify what autonomy-supportive teachers uniquely say and do during instruction, and explain how teachers can purposively become more autonomy supportive toward students.

2.1.5. Concept of teacher work environments

Working conditions is a broad term, capturing a plethora of factors and lacks any clear definition (Evans and Yuan, 2018). The European Union (2013) defines working conditions to constitute a multiplicity of factors that affect a teacher's overall and day to day job duties and can range from physical materials, material conditions of structures and equipment to student behaviour, co-worker collegiality, and supervisor support, to name a few, .Johnson (2006, 2012), pursuant to extensive literature reviews and case studies on teacher working conditions, noted that working conditions can include a) physical features such as the suitability of buildings and equipment; b) organizational structures that influence workload, autonomy, and supervisory and collegial arrangements; c) sociological components that influence teachers' roles and status as well as experiences with students and peers; d) political features that define teachers' power and authority; e) cultural dimensions that frame values, traditions, and norms; f) psychological issues that may support or diminish teachers personally; and g) educational policies, such as those related to teacher education, curriculum, and accountability, that may enhance or constrain what and how teachers can teach

A work environment refers to the elements that comprise the setting in which employees work and impact workers. While some items that comprise it are obvious, such as the wall treatment or the number of indoor plants, others are more obtuse, such as company politics or a co-worker whose personality traits do not suit the company culture. Professionals working in both full-time and part-time positions are significantly impacted by their office environment because they have to perform their duties inside it. Usually, workers are required to adapt to this workplace feature. It acknowledges the contribution of employees through job

benefits and opportunities for job growth. A good work environment; encourages the participation of employees in company operations, fosters employee contribution to decision-making, such as through peer interviewing. It also rewards productive employees and encourages communication between employees.

“Space” is a term that is so commonly used that most people think they can clearly define it. It is a term that is both thoroughly familiar and apparently unproblematic, and yet it remains mysterious. Nonetheless an attempt at a working definition must be made: “Explications of the term are necessary to distinguish legitimate from confused uses, but they will inevitably produce a possibly infuriating mixture of insights and leaden banalities” (Sayer, 1985, p. 51). What is space? According to architects and the ancient Greeks space is the exterior.

According to the ancient Romans and interior decorators, space is the interior. According to sociologists, space is constituted by the relations formed among people. According to geographers, space is the land. According to politicians, space is boundaries. According to postmodernists, space is whatever isn’t there. According to psychologists, space is mental. According to philosophers, space is insignificant; it is what space contains or what borders space that is significant. Many academic fields of studies have tried to own some of the vast territory of spatial theory. Mathematics claims to have initiated spatial theory through Euclidean geometry.

Physical sciences subdivide spatial studies into such fields as astronomy and absolute space in physics and territoriality in biology. Spatial studies in geography range from the study of landmasses to human geography. Architectural design utilizes spatial theory in building design and urban planning. Psychology examines the internal space of our mental being and social interactions. Political divisions create borders, maps that are inevitable consequences of dominance and conquest. As Lefebvre (1991) notes, the tendency is for each discipline to carve out its own corner of spatial theory. As for teachers, space is something that always seems to be lacking and almost always seems to be out of their control, (Smith, 2014). Teachers’ office space is popularly known as staffroom in secondary schools. The staffroom has been a refuge from the stress and confusion of the classroom.

2.1.6. The Concept of Classroom Assessment Practices

The first stage here will be to specify the concept of classroom assessment. Then, a second move will aim at addressing teacher assessment practices.

2.1.6.1. Specification of Classroom Assessment

Assessment is a systematic process of gathering information about students' progress headed for the learning goals Linn and Miller (2005). Assessment is mostly used for accountability purposes; however, it takes into account much more than just deciding a learners passing or failing a task to accounting for the level of teachers commitment. Shepard (2000) is on the view that assessment is the pivotal part of instructions in all learning cultures. Assessment should be viewed as a tool to measure the effectiveness of teaching and learning process and should not be interpreted as the objective of students learning experience (Yong & Lim, 2008). It should work as a tool to achieve educational goals and should work as a tool to improve learning (Irons, 2008). Assessment should assist teachers as well as learners to understand learning development, the learners progress, achievements and need for improvement (Hattie & Timperley, 2007).

For more than three decades, researchers have been conducting research meant to shed some light in the understanding of the nature and scope of teacher classroom assessment practices. There is evidence that teachers lack an adequate knowledge base regarding testing and measurement procedures. In their study, Daniel and King (1998) acknowledged findings made by Schafer and Lissirz (1987) who more than a decade earlier hoped that teachers' knowledge of testing and measurement would improve. A decade later, Daniel and King (1998) found that teachers still lacked an adequate knowledge base regarding testing and measurement procedures. Another decade later researchers found that when evaluating students' academic learning, teachers failed to adhere to recommended classroom assessment practices (Campbell & Evans, 2000). Previous research does confirm that teachers' classroom assessment practices have been taken for granted. Assessment will have positive effect on students learning and motivation, if it is aligned with the process of teaching and learning (Bloom, 1969). Classroom assessment embraces a broad spectrum of activities from constructing paper and pencil tests and performance measures, to grading, interpreting standardised test scores, communicating test results and using assessment results in decision-making.

The term formative assessment has the longest history in the educational literature, usually being attributed to Scriven (1967) and was well-known before the recent rise to prominence of assessment for learning. The definition of formative assessment proposed by Sadler (1989) is very widely used and accepted as a basis for good practice. Sadler states that formative assessment must enable students to understand the goals or standards to be achieved and their

own current level of performance and then guide them in taking action to close the gap. This requires students to develop 'expertise' in order to make effective judgments about their own performance. They need to develop evaluative skills which enable them to monitor and evaluate their own learning position, determine 'the size of the gap' and how to move towards closing it.

Sadler argues that these evaluative skills can be developed by developing 'authentic evaluative experiences' for students. Nevertheless, in their influential review of assessment practices across all sectors of education, Black and Wiliam (1998), state that formative assessment 'does not have a tightly defined and widely accepted meaning'. In their review, they refer to formative assessment as 'encompassing all those activities undertaken by teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged'. They propose that formative assessment is as much about being able to work out, or evaluate what someone is able to learn as to what has already been learned. Yorke (2003), also claims that there is a need for further theoretical development of the concept of formative assessment which 'needs to take account of disciplinary epistemology, theories of intellectual and moral development, students' stages of intellectual development, and the psychology of giving and receiving feedback' (p.477).

According to Scriven (1967), the main purposes of an assessment are to adjust and improve instructions (formative assessment) and to measure students' achievements (summative assessment). According to William & Thompson (2008), formative assessment which is also called as assessment for learning which describe the process assessment as a support for learning compared to summative assessment also known as assessment of learning which describes the nature of assessment or the product. The emergence of both formative and summative assessment have dominated the current system of assessment and are the subject of discussion in current literature (William & Thompson, 2008).

Formative assessment is a continuous process of evaluation of students learning. It provides the teacher with feedback to modify and adjust instructions and learning. According to Thompson (2008, p.60), formative assessment is used to provide information on the likely performance of students and to describe the feedback given to students... telling them which items they got correct. It occurs as a part of instruction during instructions rather than a

detached activity (Wiggins & McTighe, 2007). It includes both formal and informal formats i.e. ungraded quizzes, peer feedback, self-reflection, oral questioning and so on.

Classroom assessment is an assessment that is conducted in the classroom by the teachers (Black and William, 2004). The materials used in the classrooms could come from the teachers or any external agents. The assessment methods could be traditional written examinations, oral examinations, and open-book examinations, resources used from the internet, tests or quizzes. Another way of assessing students could be communication with them, informal assessments, content area inventories, classroom works, rubrics and scoring guide, writing journals or using checklists (Suzieleez et al., 2009). As classroom assessment is meant to be conducted in classroom only, strategies which could be used in classroom can be applied. Hedge (2000), defines assessment as the general process of monitoring and keeping records of students' progress. Gray (2002), on the other hand provides a more specific definition where she introduces assessment as "a form of systematic inquiry with the following elements: learning as hypotheses, educational practices and experiences as context, evaluation as information gathering, and decision making as direction for improvement" (p. 58). According to Walvoord (2010), assessment is a "systematic collection of information about students' learning, using the time, knowledge, expertise, and resources available, in order to inform decisions that affect student learning" (p. 2). 'Assessment' is a way of getting information about the teaching and learning progress through a set of procedures, in which information received, could be used to feed back into the educational system. Moreover, classroom assessment gives teachers the opportunity to take immediate and appropriate action to improve planning, teaching methods and approaches (Black & William, 1998). McMillan (2007), expresses classroom assessments as a process that advocates and enhances student learning, and is not just a document about what students know, understand and do.

Classroom assessment is also described as a process that According to Chappius et al. (2012), teachers need to have good knowledge and encompasses a wide scope of speech and observation records up to the standard test stage. Assessment is an umbrella term. Grant Wiggins and Jay McTighe, authors of *Understanding by Design*, explain that it includes many methods of gathering evidence about student learning. These include observations and dialogues, traditional quizzes and tests, performance tasks and projects, as well as students' reflections on their own learning.

Some methods of evidence-gathering happen while learning is still unfolding (formative assessment), helping to inform and adjust instruction. Other methods occur at the end of a course

or unit of study (summative assessment) and assess whether students have reached the intended learning goals. Some methods are informal while others come with high stakes. Yet all kinds of assessment play a role in shaping understanding. Indeed, in *Understanding by Design*, Wiggins and McTighe state: “Understanding can be developed and evoked only through multiple methods of ongoing assessment, with far greater attention paid to formative (and performance) assessment than is typical.” When used effectively, assessment can facilitate high levels of student achievement, according to the authors of “Knowing What Students Know”. Assessment helps students learn and succeed in school “by making as clear as possible to them, their teachers, and other education stakeholders the nature of their accomplishments and the progress of their learning.

Comprehensive assessment entails the whole system of assessing student understanding as a mechanism to improve teaching and learning. Teachers use multiple strategies to gather and share information about what students understand and to identify where they may be struggling. Well-designed assessments help students chart their own progress toward learning goals and help teachers modify instruction as needed. An example of alternative assessments is the portfolios and teachers prepare for students learning as illustrated on the figure below:

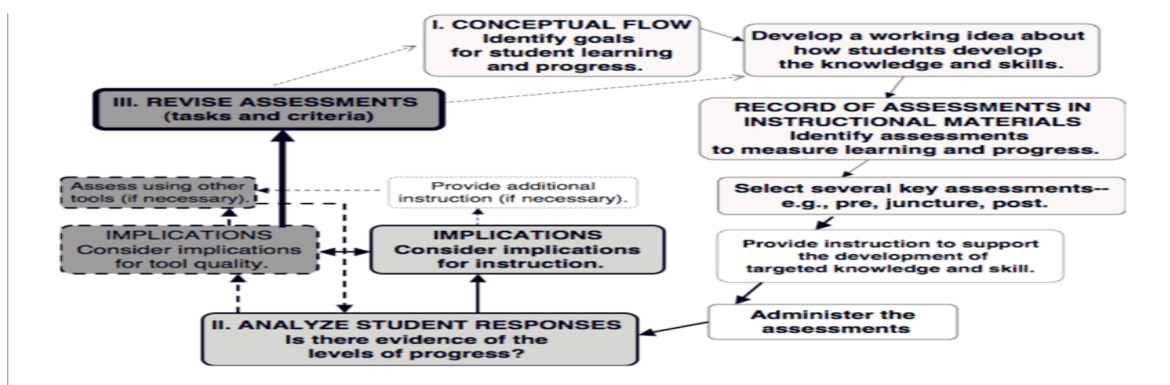


Figure 4: Academy Assessment Practices

Adopted from (Gearhart et Osmundson, 2009)

Authentic assessment (or performance assessment) asks students to demonstrate their learning by making a product or by doing a task, performance, or exhibition to show what they know and can do. Authentic assessment mirrors what happens in the real world when scientists, architects, musicians, and others apply their discipline-based knowledge to solve authentic challenges. In project-based learning, projects typically conclude with an authentic performance or presentation. Typically, teachers score authentic assessments according to

rubrics that define quality work or proficiency according to various categories (such as mastery of key content, communication skills, teamwork, and so forth).

Blended assessment is a combination of traditional and technology-based assessments, for instance, combining paper-and-pencil tasks, online tasks, and peer assessment.

Classroom assessment could either be formative or summative depending on its type. If the assessment is implemented when teachers and students provide feedback to adjust an ongoing teaching and learning to improve students' achievement (Popham, 2008), it is called formative.

For example, Cowie and Bell (1999, p. 101) generally identify formative assessment as a kind of assessment used for the purpose of enhancing teaching and learning. In their earlier work, Cowie and Bell suggest that this kind of assessment is “the process used by teachers and students to recognize and respond to student learning in order to enhance that learning, during the learning” (Cowie & Bell, 1996, p. 3). Gipps (2002), defines formative assessment as “the process of appraising, judging, or evaluating students' work or performance and using this to shape and improve students' competence” (p. 74). According to Carless (2011), the formative role of assessment shapes “current and future student learning” (p. 5) which involves the diagnostic role of assessment. William (2006, p. 284) argues that “assessments are formative...if and only if something is contingent in their outcome, and the information is actually used to alter what would have happened in the absence of the information.” Carless (2011), recently asserted that current conceptions of formative assessment do not solely refer to a formal assessment, but also refer to the everyday classroom interactions for and during the learning process which will be carried out in a systematic way. He further concludes that “formative assessment is to do with eliciting and interpreting evidence, so as to enhance instruction and improve student learning” (p. 7).

David Hargreaves (2001) of the Qualifications and Curriculum Authority seemed to be drawing on Sadler's (1989) writing about formative assessment when he defined assessment for learning as: ...about teacher and student having:

- A clear understanding of the desired standard that the student is seeking to reach.
- A recognition of the gap between student's current performance and the desired standard.

- A readiness of either or both of them to adjust what they do to help the student to close the gap between performance and the desired standard.

It is noticeable in that ‘performance’ rather than ‘learning’ is the word used.

In the second group of definitions of assessment for learning, (Hargreaves, 2005), Assessment for learning (formative assessment) meant using assessment to inform next steps in teaching and learning. This conception of assessment for learning seems to be related to the assumption of the first conception that teachers and students need to be clear where learning is heading. Assessment for learning then becomes the means of working out what action needs to be taken next. Among the 83 teachers, some teachers suggested this was the teacher’s role, while others saw it as a shared job between teacher and students. Some conceptualized assessment for learning as a means to revealing remedial needs. One teacher mentioned teachers’ assessment of what children have learnt ‘and how they learn best’, in this case focusing on learning processes rather than performance.

This conception mirrors that of Black and William (1998). They defined assessment for learning as:

... all those activities undertaken by teachers, and by their students in assessing themselves, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged. (p.2, emphasis in original)

Shirley Clarke’s definition of formative assessment (or assessment for learning) is similar to Black and William’s: ‘Assessment which engages with and helps define the appropriate next steps for the individual’ (2001). This next-step approach to assessment for learning was also portrayed in the writing of Gipps et al. (2000), who described the dominant model of formative assessment as:

... using assessment information to feed back into the teaching process, and to determine for individuals or groups whether to explain the task again, to give further practice on it or move onto the next stage. (p. 6)

In this definition, Hargreaves points out that assessment for learning is the teacher's rather than the pupil's job; however, these authors (Gipps et al.) add that '...some observers believe that assessment is only truly formative if it involves the pupil' (p. 6).

Group tasks, projects, exercises, assignments, discussions and individual tasks are some of the usual elements of formative assessment in the classroom (Hall, Woodroffe & Aboobaker, 2007). Oral questioning, exercises, homework, unit tests and activities are the formative assessment practices (McMillan, 2011). Paper-pencil tests, homework and classroom discussions are some of the tools which can be used to assess students (Murnane & Sharkey, 2006). Formative assessment includes group discussions, written reports and hands on activities (Sato et al, 2008). Seminars are also one of the formative assessment method (Brown et al, 2000).

Assignment: Assignment is a task which students are provided with to accomplish at their own free time (Scouller, 1998). It is something of paramount importance for both teacher and students, as the teacher assesses the progress of the students and the learner becomes familiarized with the pedagogical content (Venter & Prinsloo, 2011). It compels students to read further and can be done using internet or library. This may be formal or informal but its nature will be formative of course (Hall et al, 2007).

Group-work: Group work is an assessment form and formative assessment strategy in which learning is supposed to happen in groups (Davis, 2009). It is group work that helps students in developing transferable skills for constant learning i.e. leadership, teamwork, communication and management.

Homework: Homework is the fundamental element of teaching and learning and it is considered as a strategy of formative assessment that enables the students to assess themselves. It can be done through web, where students are required to answer questions on a particular website (Kieso, Weygandt and Warfield, 2011).

Oral questioning: Oral questioning plays a vital role in the checking of students understanding during instructions (McMillan, 2011). He adds, it is questioning that attract students' attention, make them think and make them involved in the lesson. It is questioning that makes the lesson student-centred and practical and brings about discussion.

In order to direct the lesson, questions are asked as formative assessment (Shermis, 1953).

Presentations: Presentations are an essential career skill which students need to master as they will be assessed on how convincingly and authoritatively, they can speak (Brown, Race & Smith, 2000). There are numerous ways of presenting information in the classroom such as audio files, video files, photos and link to websites and movies (Cummins & Davesne, 2009).

Quizzes: Quizzes are skill, knowledge and growth measuring assessment strategies used in education. (Murray, Johnson & Johnson, 2002). They are short and have fewer simple questions and can be carried in shorter periods of time as compared to tests.

Tests: It is great tests that bring about great learning (Knight, 1995). Test has different forms but most dominant are multiple choice and include the ones which require right answer (Russell & Airasian, 2012)

When implementing assessments, there are several factors that influence the educators' assessment practices especially in the classroom. These factors could explain the reasons why educators choose specific types of assessments to be practiced in their classroom. To further understand what those factors are, several studies were conducted by previous researchers to explore more on the factors that influence the assessment practices.

Duncan & Noonan (2007), stated in their article that "it is important to know how classroom learning conditions, like the size of the classroom, teachers' training, experience of teaching, grade level and subject area affect teachers' assessment and grading practices". Therefore, the study they conducted was to investigate whether these factors play an important role in teachers' assessment practices, more specifically the factors of subject area, class size and school size. The study found that the subject area does influence the teachers' choice of assessments in the classroom. For example, Mathematics teachers use constructed-response assessment less regularly than teachers of other subject areas and would use more assessments related to cognitive abilities rather than assessments related to non-cognitive abilities (such as participation in the classroom and efforts of the students in completing an assessment or assignment). Other than that, this study also found that the class size and the school size have little effect on the teachers' assessments practices. This means that no matter how big or small the size of a class or a school is, it is not really a factor of why a teacher chooses certain types of assessments to be practiced.

Meanwhile, Chih-Min & Li-Yi (2007), presented more factors of teachers' assessments practice in their study. They interviewed forty English teachers in Singapore context in order

to find out what factors influence their assessment practices. These were among the factors discovered by the researchers; 1) high stakes examinations, 2) school management, 3) physical environment and facilities, 4) parents, 5) professional coursework, and 6) experience in their classroom practice. These factors are in different dimensions than Duncan & Noonan (2007) study. Based on this study, the participants said; as Singapore emphasizes heavily on the high-stake examination, they tend to gear their assessment practice towards the summative assessments. Some of the participants also said that they were not allowed to do alternative assessments to assess their students; hence they had to stick with the types of assessments outlined by the school management. Other than that, the physical environment and facilities in the school and classroom also affect their choice of assessments.

For example, one Participant in this study mentioned that at times when the environment was hot and noisy, it was impossible to conduct speaking and listening tests.

Chih-Min & Li-Yi (2007) also found that parents also influenced teachers in their assessment practices. They figured out from the teachers in government schools that parents put pressure on them about the assessment methods while in private schools, parents pressured the teachers in terms of marking and grading papers. The researchers also found out that professional coursework and training helped the teachers to learn more and practice more varieties of assessments.

Similarly, Saxe, Franke, Gearhart, Howard, & Crockett, (1997), in their study also reported that professional development program helped the Mathematics teachers they interviewed to shift their old assessment practices to new practices. The teachers asserted that from the professional development program, they learned to assess their students' higher order thinking skills rather than lower order thinking skills. The experience from the classroom practice also played a role in this matter (Chih-Min & Li-Yi, 2007). One Participant mentioned that when she found out that summative assessment did not help her students to improve, she switched to formative assessments to ensure her students' understanding in the teaching and learning process.

From these studies, we could see that conducting assessments is not easy and there are a lot of factors that a teacher has to consider before practicing the assessments in the classroom.

Planning and developing classroom assessment tasks requires teachers to make a number of decisions, such as determining the purpose of the assessments, making decisions on how to use assessment results, making decisions about the content to be included in test, determining

the instructional objectives (skills) to be measured, identifying the type of assessment formats to be used, deciding on a number of items to be used, determining how student's responses will be graded (McMillan, 2008; Nitko, 2001; Popham, 2008; Reynolds, Livingstone & Wilson, 2009). Stiggins (1994), argued that building a test without a plan is like building a house without a blueprint. Stiggins's view is that two things will happen, test construction process may take much longer than anticipated and the final product may or may not be what the teachers had hoped. This clearly indicates that teachers need more guidance for them to be more competent in basic test planning and construction methods.

Campbell and Evans (2000), evaluated assessment practices of pre-service teachers who had just completed a course in educational measurement. The authors reviewed pre-service student teacher lesson plans, and found that none contained all of the necessary criteria established as necessary for evaluating students' learning. Student-teachers failed to use test planning practices such as a table of specifications, which is necessary to make a direct link between instructional goals and test items. The authors believed that by omitting test planning practices, pre-service teachers were unable to explicitly document the association between curriculum goals, instruction, and student achievement. One of the essential steps in assessment practices that is often taken for granted but serve an important role is for teachers to make decisions as to why they are assessing students. Teachers may want to make a decision to use assessment information to diagnose students' learning problems, guide and improve future instructional methods, or just for summative evaluation to determine students' final grades at the end of the term (Airasian, 1994; Gronlund & Waugh, 2009; McMillan, 2005; Popham, 2006; Reynolds, Livingstone, & Willson, 2009).

Airasian (1994), devised a list of decisions that teachers should make as they embark in their classroom process. Airasian encouraged teachers to base their decisions on the following: What to test, how much emphasis to give to each instructional objective, what type of assessment tasks, (tests, projects, assignments) to use, how much time to allocate for each assessment task, how to prepare students for the assessments, and whether or not to use tests from textbooks, or construct their own tests. Other important factors that teachers must take into consideration when planning tests include; subject matter domain assessed, test constructor or user such as (ease of test preparation, ease of scoring test, etc.), and various extraneous factors for instance (guessing, copying, bluffing) possibly affecting the psychometric properties of test scores (Zeidner, 1987, p. 352). Some researchers argued that the level at which teachers design, develop, embed, and implement classroom assessment

practices is not clearly articulated. For this reason, Ayala, Shavelson, Ruiz-Primo, Brandon, Furtak, Young, and Tomita (2008) outlined five critical activities that comprise the phase of embedded assessment development that teachers can adopt as they design, develop, embed, and implement classroom assessment practices. These include: (1) Mapping and experiencing the curricular unit in which the classroom assessments will be embedded, (2) Determining the unit goal to be assessed, (3) Determining the critical points where the assessments should be embedded, (4) Defining the assessment development guidelines, and (5) Developing the assessments.

On the same note, Stiggins (1994), added other effective types of test planning activities that teachers can choose from to improve their assessment practices. Stiggins argued that teachers can use a table of specification, a two-way table that matches the objectives or content teachers taught with the level at which they expect students to perform. It contains an estimate of the percentage of the test to be allocated to each topic at each level at which it is to be measured. Teachers can also rely on a list of instructional objectives to guide their test construction process. Teachers can match the instructional objectives with assessment tasks (tests, assignments, projects). All these steps are essential for planning assessment tasks.

However, the single most important test planning and construction process that teachers must understand is how to design appropriate learning objectives also known as learning outcomes, which specify what the teachers want students to know or be able to do at the end of the course or at the end of a unit, topic, term, or a class activity. Everything that goes on the course including instructional methods used, assessment methods used (tests, assignments, projects) are driven by learning objectives. For this reason, teachers must have a good understanding of how to construct specific, measurable, attainable, realistic, and student-centered instructional objectives (Airasian, 1994; Gronlund & Waugh, 2009; McMillan, 2005; Popham, 2008; Reynolds, Livingston & Willson, 2009).

In a third group of definitions, assessment for learning meant teachers giving feedback for improvement. The teachers who defined assessment for learning in this way suggested a range of types of 'improvement' that feedback would promote. Hargreaves reported that many described feedback as the means to 'Move forward learning'. Others, however, described its purpose as:

- To develop teaching and learning strategies for individual pupils.
- To boost self-esteem, inspire, motivate.

- To cause the learner to think.
- To promote deeper learning and understanding.

Hargreaves points out that some of these definitions seem to belong to a conception of assessment for learning in which taking next steps towards a given standard, is the main emphasis. The Assessment Reform Group (1999), for example, claims for feedback that it can lead ‘...to pupils recognizing their next steps and how to take them’ (p. 7). Black and Wiliam (1998:9), have argued that:

Feedback to any pupil should be about the particular qualities of his or her work, with advice on what he or she can do to improve.

Similar emphasis is found in the writing of Weeden et al. (2002), who use the ‘gap’ metaphor explicitly, saying that:

The best feedback effects occur therefore when the gap between desired and achieved performance is clearly identified. (p. 109)

It is notable that in all these examples, feedback is seen as a ‘gift’ from teacher to pupil, rather than an interaction between teacher and pupil or among pupils (Askew & Lodge, 2000:5).

A fourth group as defined in Hargreaves’ study can be summarized as Assessment for learning meaning (teachers) learning about children’s learning. Conceptions of assessment for learning which focused on teachers learning about children’s learning refer to a broad scope of such learning. Teachers described assessment for learning as:

Looking at how children pick up ideas and how we can support them in this process.

Discovering what learners comprehend and how they want to expand and excite this.

Learning how children learn and preparing for learning.

Seeing where the child is: how does the learner learn?

How do they perceive learning?

How are they motivated?

Looking at the whole child.

These conceptions also relate to some teachers’ conceptions of assessment for learning as: Teachers’ reflection about their teaching and the impact it is having on learning. In this model, the focus is still on improving future learning, but the emphasis is on the child’s future

learning processes rather than performances, that is, on how she or he learns rather than what she or he can do, knows or understands. According to Hargreaves, this emphasis on (often internal) processes rather than observable performances is reflected in the writing of Watkins et al. (2001). He shows what to some seems paradoxical, that: "...a focus on learning [processes] can enhance performance, whereas a focus on performance can depress performance" (p. 7) .

In Hargreaves' fifth group of definitions, Assessment for learning meant children taking some control of their own learning and assessment, although what this looked like in practice was described variously. For some it meant Children understanding the next steps in learning. The learner learning what he or she will need to do to improve on the summative assessment.

Others focused more on learning processes: Children talking and reflecting on their own learning in order to develop and grow. Children having some elements of control over how/what/why/ they are learning. The learner knowing how to get the knowledge/skill they want. This latter stance makes the neat divide between assessment of learning and assessment for learning, less clear-cut, as students make an assessment of their own learning processes this itself enhances their future learning. Finally, Hargreaves discusses how several teachers referred to children self-assessing as essential to assessment for learning. Within the 'next-steps' model, the importance of self-assessment is stressed by Black and Wiliam (1998), who wrote that:

... the link of formative assessment to self-assessment is not an accident – it is indeed inevitable ... pupils can only assess themselves when they have a sufficiently clear picture of the targets that their learning is meant to attain.
(pp. 9-10)

To reflect the emphasis on learning processes, Torrance and Pryor (1998) have suggested that formative assessment '... must inevitably involve pupils reflecting on what they have achieved and how they have achieved it' (p. 8). This position is also expressed by Watkins et al. (2002:1), who explained how learning can take place, 'Whatever the overall time scale, time is required for individuals to reflect, make meaning, and move forward'.

In Hargreaves' final and sixth group of definitions, Assessment for learning was defined as turning assessment into a learning event. A few teachers simply wrote that assessment for learning meant 'Turning assessment into a learning event'.

This version of assessment for learning is most clearly stated by Dann (2002), who defines assessment for learning as:

Assessment [which] is not merely an adjunct to teaching and learning but offers a process through which pupil involvement in assessment can feature as part of learning – that is, assessment as learning. (p. 153)

Torrance and Pryor (1998) developed their formative assessment ideas out of an earlier research project, Teacher Assessment at Key Stage 1, also known as the TASK project. 'TASK was basic research grounded in classroom observation, which yielded a description and analysis of teachers' informal assessment practices in infant classroom (i.e. ages 5-7 years). It explored the extent to which teachers and pupils shared an understanding of the nature and purpose of assessment "events", drawing on and integrating a number of different theoretical perspectives' (Torrance & Pryor, 2001:616). The researchers concluded that 'attention to the social construction and accomplishment of classroom assessment was a prerequisite for any systematic attempt to improve the quality of interaction and the positive impact of formative assessment on learning' (Torrance & Pryor, 1998 as stated in 2003:616).

From these various aspects of their research they synthesized a 'model of classroom assessment as an inter-subjective social process situated in, and accomplished by, interaction between students and teachers' (Torrance & Pryor, 2003:616). Their TASK project identified two "typical" approaches to formative assessment which were not necessarily mutually exclusive in practice: one "convergent", the other "divergent" (see table. 4).

Table 4: Convergent and divergent classroom assessment (Torrance & Pryor, 2001:617)

Convergent Assessment	Divergent Assessment
Assessment which aims to discover if the learner knows, understands, or can do a predetermined thing. This is characterized by:	Assessment which aims to discover what the learner knows, understands, or can do. This is characterized by:
Practical Implications a. precise planning and an intention to	Practical Implications a. flexible planning or complex planning which

<p>stick to it;</p> <ul style="list-style-type: none"> b. tick lists and can-do statements; c. an analysis of the interaction of the learner and the curriculum from the point of view of the curriculum; d. closed or pseudo-open questioning and tasks; e. a focus on contrasting errors with correct responses; f. judgmental or quantitative evaluation; g. involvement of the student as recipient of assessments. <p>Theoretical Implications</p> <ul style="list-style-type: none"> h. a behaviourist view of learning; i. an intention to teach or assess the next predetermined thing in a linear progression; j. a view of assessment as accomplished by the teacher. <p>This view of assessment might be seen less as formative assessment, rather than repeated summative assessment or continuous assessment.</p>	<ul style="list-style-type: none"> incorporates alternatives; b. open forms of recording (narrative, quotations, etc.); c. an analysis of the interaction of the learner and the curriculum from the point of view both of the learner and of the curriculum; d. open questioning and tasks; e. a focus on miscues – aspects of learner’s work which yield insights into their current understanding, and on prompting metagacognition; f. descriptive rather than purely judgmental evaluation; g. involvement of the student as initiator of assessments as well as recipient. <p>Theoretical Implications</p> <ul style="list-style-type: none"> h. a social constructivist view of learning; i. an intention to teach in the zone of proximal development; j. a view of assessment as accomplished jointly by the teacher and the student. <p>This view of assessment could be said to attend more closely to contemporary theories of learning and accept the complexity of formative assessment.</p>
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In convergent assessment, the important thing is to find out if the learner knows, understands, or can do a predetermined thing. It is characterized by detail planning, and is generally accomplished by closed or pseudo-open questioning and tasks. Here the interaction of the learner with the curriculum is seen from the point of view of the curriculum. The theoretical origins of such an approach would appear at least implicitly to be behaviourist, deriving from mastery-learning models and involving assessment of the learner by the teacher. Divergent assessment, on the other hand, emphasizes the learner’s understanding rather than the agenda

of the assessor. Here, the important thing is to discover what the learner knows, understands, and can do. It is characterized by less detailed planning, where open questioning and tasks are of more relevance. The implications of divergent teacher assessment are that a constructivist view of learning is adopted, with an intention to teach in the zone of proximal development (Vygotsky, 1986). As a result, assessment is seen as accomplished jointly by the teacher and the student, and oriented more to future development rather than measurement of past or current achievement' (Torrance & Pryor, 2003:617).

The defining formative assessment is somewhat elusive. Practitioners and researchers struggle to find common ground on what it means as evidenced by Hargreaves (2005), findings which are summarized in table (table 5) below.

Table 5: Summarization of Hargreaves' definitions of 'Formative Assessment' (2005)

Group no.	Definition:
1	Monitoring pupils' performance against targets or objectives
2	Using assessment to inform next steps in teaching and learning
3	Teachers giving feedback for improvement
4	Teachers learning about children's learning
5	Children taking some control of their own learning and assessment
6	Turning assessment into a learning event

When assessment is measuring students' level of attainment in the form of monitored examination, it is called summative (Rayment, 2006).

Summative assessment generally refers to the process of evaluating students' learning for the purpose of grading or for sorting or comparing students; this is usually done at the end of a unit, a course, or a program (Earl, 2003), hence, separate from teaching and learning process. The use of examinations and psychometric tests are conventional means of assessing learners; they do not look into how assessment can feed forward and be used to assist teaching and learning as their main focus is on the final product, often expressed in terms of a grade. Scriven (1967), and Bloom, Hastings, and Madaus (1971), defined summative assessment or evaluation as the type of assessment that is given at the end of units, terms, or courses which is used to measure the extent of the students' learning. Similarly, Trotter (2006, p. 507), states that summative assessment, traditionally, measures student achievement and gives

information about students' level of performance. The purpose of summative assessment obviously differs from formative assessment where the aim is not to indicate the mastery of particular skill or concept but rather to indicate a general learning achievement through a standardized grading system.

Interestingly, William and Black (1996, p. 538), note that “the results of an assessment that had been designed originally to fulfill a summative function might be used formatively.” Similarly, Taras (2005), who studied the relationship between formative and summative assessment, suggests that an assessment task may be used for both formative and summative purposes where “it is possible for assessment to be uniquely summative where the assessment stops at the judgments... however, it is not possible for assessment to be uniquely formative without the summative judgment having preceded it” (p. 468).

Teachers need to know how to compile the data and produce the assessment results effectively to improve students' achievement. In addition, the important thing for a quality classroom assessment is to design the assessment to meet the needs of certain data users, based on the assessment of the concrete and appropriate achievement targets, to determine precisely the achievement of the students, to produce evaluation results that effectively communicate to users and involving student participation in self-assessment, goal setting, monitoring, reflection, and sharing of learning among students.

Quality improvement is the ultimate goal of assessment that mutually interlinks it with quality assurance. In his book, Heywood (2000), describes assessment as the principle guarantor of quality assurance in education that provides a dominant influence on student learning with the belief that effective assessment depends on assessors, having a substantial knowledge of human development and learning. Truly, the quality of assessment is mainly deep-rooted from the quality of classroom assessment procedures enforced by the institution. Assessment is an integral and vital part of the teaching and learning process which when properly done would create boundless and vast-ranging benefits to the students, teachers, and school leaders. Hence, teachers are expected to have an established proficiency on classroom assessment in order to positively influence the learning of the students. However, some teachers and institutions do not put into practice the fundamental purpose of preparing classroom assessments. Stiggins (2008), urges teachers to ask themselves the question: “Do we, the teachers, contribute to excellence in classroom management?” This is a call for teachers to be extra-mindful about the academic well-being of the students. It is believed that teachers are

not only coaches and facilitators during instruction but also assessors and auditors during classroom assessment. This is in consonance to the etymological meaning of the term ‘assessment’ which originates from the Latin term “sede” and “sedere” which means ‘to sit down beside or together’. In this sense, teachers ensure the value of learning among students through the results of classroom assessment.

In a classroom assessment, the teacher who teaches the course is the same teacher who prepares the exam. The results are used to judge the learning experience of the students and to decide improvements in the learning needs and teaching-learning processes of the class. An important tool in the preparation of an assessment is the use of a test blueprint. A test blueprint is an assessment tool which interlinks what is taught and what is tested. It is also a fundamental block in test construction which makes use of the Bloom’s Taxonomy of Learning framework, which ensures a fair, complete, valid, reliable, and objective set of test questions (Cruz & Singun, 2014). A test blueprint shows the structure of a test. It usually includes the content areas along the left side of the table and the cognitive levels are shown on the right side, across the first row of the table. (Suskie, 2009).

According to Guskey (2005), there is a resemblance between a test blueprint and a travel guide. It helps teachers move students towards the mastery of standards. A test blueprint is a tool used to support teachers in judging students’ performance or assessing learning experience more objectively. If the test blueprint is not put into use, preparing test questions become very subjective. Most teachers will identify question items that are based on their sole predisposition. Such a practice has yielded to the diverse coverage of exam, the differing level of difficulty, and the obvious mismatch between test questions and course learning outcomes. Briefly said, there had been no formal exam procedure in place during those past years (Singun, 2016). It is difficult to trace the inception of test blueprint; however, the book of Ruch (1924), entitled “The Improvement of the Written Examination” made some arguments that supported objective tests.

A test blueprint, which is sometimes called Table of Specifications, Test Specifications, Test Matrix, or Test Plan (Suskie, 2009; Coombe, Davidson, O’Sullivan & Stoyhoff, 2012), is a two-way chart (Nortar, Zuelke, Wilson, & Yunker, 2004) that consists of the instructional objectives and its corresponding cognitive level as well as the amount of the test (Nortar et al., 2004) to construct tests more objectively. There are different versions of Test Blueprints designed for different purposes (Guskey, 2005; Fives et al., 2013; Alias, 2005). A test

blueprint can be simplified or complicated to best meet the needs of the intended users (Fives et al., 2013). Hence, the formats of test blueprints may vary depending on the needs of the institution (e.g., Nortar, Zuelke, Wilson, & Yunker, 2004; Linn & Gronlund, 2000). For instance, a test blueprint can be used for formative assessments (Guskey, 2005) or for summative assessments (Fives et al., 2013; Alias, 2005) as shown on the sample tabular structure in Table 7, linking formative classroom assessment and instruction. The teacher ensures the inclusion of all the learning targets that measure all the important skills and abilities of the students. A formative classroom assessment provides performance feedback on what students have mastered, how much they have learned and have to learn, how well they are learning, and what needs to happen next. A classroom assessment designed for formative evaluation purposes would include items that assess students' knowledge of relevant terms, facts, principles, and procedures, as well as other items that measure their skill in translating information into new forms.

Critical to teachers is the use of assessment to both inform and guide instruction (Rahim, Venville and Chapman, 2009). Using a wide variety of assessment tools allows a teacher to determine which instructional strategies are effective and which need to be modified. In this way, assessment can be used to improve classroom practice, plan curriculum, and research one's own teaching practice. Similarly, assessment will always be used to provide information about performance to learners, parents, and administrators (Brown and Hirschfeld, 2008). This information is being increasingly seen as a vehicle for empowering students to be self-reflective learners who monitor and evaluate their own progress as they develop the capacity to be self-directed learners. In addition to informing instruction and developing learners with the ability to guide their own instruction, assessment data can be used by a school district to measure learner achievement, examine the opportunity for children to learn, and provide the basis for the evaluation of the district programme (Harris and Brown, 2008). The teacher's role in the changing landscape of assessment requires a change from being merely a collector of data to a facilitator of learners' understanding of principles.

Kahn (2000:279) reported that teachers assess learning for a wide variety of purposes, for example, to judge degree of mastery, monitor progress, diagnose learning difficulties, evaluate teacher and instructional effectiveness, inform learners about their own achievement, individualize instruction, group learners and provide a basis for school marks.

In addition, teacher-designed assessment may serve other important roles in the classroom: as a way of maintaining learner motivation, cooperation, and attention; justifying to learners the inclusion of certain instructional activities; encouraging them to read a text, listen to a lecture, or take notes; and rewarding those who cooperate and work hard by completing assignments and listening attentively while penalizing those who do not (Rust, 2005).

According to the DoE (2007:22), assessment is used to determine whether the learning required for the achievement of the learning outcomes is taking place and whether any difficulties are being encountered. Furthermore, assessment is used to report to parents and other role players and stakeholders on the levels of achievement across a range of competencies acquired during the learning process, and to build a profile of the learners' achievement across the curriculum. Information is provided for the evaluation and review of learning programmes used in the classroom, so as, to maximize learners' access to the knowledge, skills, values and attitudes as defined in the National Curriculum Statement (NCS). Assessment in the NCS is used to assist with the early identification of learners, who might experience barriers to learning and development, as well as to provide them with learning support and to determine the progression of each learner through the acquisition of knowledge and range of competencies. Overall assessment is meant to support the development of all learners and make judgments about learners' progress.

Lekoko and Koloji (2007) conducted a survey with pre-service teachers enrolled in education classes at the University of Botswana. The purpose of this study was to explore students' perceptions regarding the correlation of teacher's feedback and the grades that teachers award to students. Students revealed some experiences regarding how their work is graded and the nature of feedback they receive from their lecturers. This study showed that when lecturers grade students' work they did not provide adequate comments that could help students understand where they went wrong, teachers gave low marks that are not accounted for in terms of what and how the teacher arrived at the marks. There was no reconciliation of marks and comments accompanying them, and teachers made ticks that were incompatible with the marks given. The main argument that Lekoko and Koloji (2007) made in this study was that when there is a discrepancy between teachers' comments and grades that students receive, students are left frustrated as this robs them of the potential to improve in their learning. For this reason, it is essential that teachers should be given sufficient assessment training that would enhance their grading practices and equip them with skills of giving effective, efficient,

and useful feedback to students. In sharing a narrative perspective on views about grading and giving students feedback Wormeli (2006) contends that “Assessment and feedback, particularly during the course of learning, are the most effective ways for students to learn accountability in their work and in their personal lives” (p. 14). Wormeli stressed the need for teachers to use grading and feedback practices that can best serve the interests of students. Some of the recommendations that Wormeli made were that when grading and giving students feedback, teachers should clearly show what students did, what they were supposed to do, and then help them compare and contrast the two. McMillan (2008) conducted a study to document the differences in actual assessment and grading practices conducted for a specific class taught by teachers across a range of subjects. Results of the study revealed that secondary school teachers use a multitude of factors when grading students work.

A mixture of factors to determine grades were organized into four clearly distinct components: academic achievement, academic enablers (such as effort, ability, improvement, and participation), use of external benchmarks, and use of extra credit and borderline cases). Academic achievement was considered to be the most important process in grading students’ work. Two thirds of teachers who participated in this study were reported to have agreed with the use of academic enablers (effort, ability, and improvement) when grading students’ work. Teachers defend their choice to use non-achievement factors, such as effort, because they see them as some form of borderline to determine grades; and that such factors are good proxy for student achievement. Both primary and secondary school teachers have been found to use non-achievement factors when they award grades to their students to raise or lower grades except in borderline cases, they were also found to reward hard work by raising borderline grades and some would lower borderline grades for lack of effort (Cross, Robert, Frary, & Weber, 1993).

The grading systems that teachers use in different countries should not be seen as isolated practices, but should be viewed in the context of educational systems in which they are used. To account for the dimensionality and variability of how teachers conduct their grading practices, it becomes imperative to take into account the context of educational systems where teachers implement such practices, as well as the purpose of the grading system where such grading practices are taking place. Teachers must first decide the purpose grades will serve even before they choose the grading method therefore grading should also be based on a defined plan. Such a grading plan must meet the needs of both the teacher and student (Hammons & Barnsley, 1992). MacMillan and Nash (2000) argued that grading students’

work can be a complex process as it is guided by an array of issues such as; results that come from assessments, teachers' beliefs and values, and overall learning goals. Part of grading practices entails the process of giving students feedback. It must be understood that grades form an important process in student assessment. Grades can have major life implications as individuals or students may have certain perceptions about them. Grades also have ethical implications because they are concerned with fairness and the rights of students. The legitimacy of grades is entirely dependent on the grading practices that teachers adopt.

They should be reliable, valid, comparable, and fair (McMillan, 2008; Miller, Linn, & Grounlund, 2009; Popham, 2008; Reynolds, Livingston, & Willson, 2009). Giving students feedback is central to students' education as it promotes learning and ensures that educational standards are met. Blatt (2005) states that feedback is meant to be a guidance system that keeps students on track of how to learn and master the subject matter. Assessment entails a broad spectrum of activities that include collection of information for decision making. The responsibility of teachers is to collect information through various assessment methods that can be used to make informed decisions concerning students' learning progress. The question is; are teachers competent enough to use or apply assessment information for making students' learning decisions? Zhang and Burry-Stock (2003) argued that to be able to communicate assessment results more effectively, teachers must possess a clear understanding about the limitations and strengths of various assessment methods. Teachers must also use proper terminology as they use assessment results to inform other people about the decisions about student learning. Stiggings (2004) echoed the same sentiments by arguing that in the past, schools were designed to use assessment results to sort students from the lowest to the highest achievers. When assessment information was used this way, many students did not perform well and had a sense of hopelessness in learning.

However, over the past few decades the mission of sorting students in rank order has evolved into missions of "no child left behind" where teachers are held accountable for ensuring that all students are accorded the chance to meet their educational potentials. Teachers used assessment information to identify students' learning needs "As teachers diagnose student needs, design and implement instructional interventions, evaluate student work, and assign grades, they need continuous access to evidence of student learning arising from high-quality classroom assessment practices" (Stiggings,2004, pp. 25-26). Teachers depend on the classroom assessment information to improve their instructional methods, and as such, that information plays an important role in student learning. It is apparent that teachers should be

competent in the collection, analysis and use of assessment information. Some professional bodies such as the American Federation of Teachers, the National Education Association, and the National Council on Measurement in Education (1990) devised a set of standards that could guide teachers' assessment practices. These bodies recommended that teachers should be skilled in: (a) choosing assessment methods that are appropriate for making instructional decisions, (b) developing all types of assessments, (c) administering, scoring, analyzing, and interpreting assessment results developed from teacher-made assessment procedures, (d) developing assessment procedures needed to make informed decisions, (e) developing justifiable and fair assessment procedures, for grading students work, (f) communicating assessment results to students, parents and other relevant stakeholders, and (g) recognizing and exercising ethical standards when assessing students.

Unfortunately, giving quality feedback to students is a difficult component of teaching such that teachers often avoid this aspect of grading process (Hewson & Little, 1998). For feedback to be effective, it should be prompt, closely follow the event, contain encouragement, be specific about why something was good or not. It should not focus on too many different aspects at the same time. It should be clear, and focus on the work done by the student, and not on the student (Crooks, 1988; Gibbs & Simpson, 2004; Rogers, 2001). In an attempt to explore grading practices, issues of judgment, communication, and character development in grading through a framework which exposes the underlying moral issues in grading, (Zoeckler, 2007) examined how teachers arrived at a fair grade while weighing both achievement and non-achievement factors. The role of teacher expectations were also examined using a theoretical framework which considers grading processes in terms of truth, worthwhileness, trust, and intellectual and moral attentiveness.

Zoeckler (2007) collected data from rural high school teachers in upstate New York through interviews. What emerged in this study was that teachers continue to struggle with issues of fairness as they grade students' work. The main argument that Zoeckler made was that teachers' grading and feedback to students is influenced by teachers' values and beliefs. Zoeckler argued that even though teachers' moral issues in assessment often go unexplained, they play a major role in the assessment practices they adopt. McMillan and Nash (2000) studied reasons teachers give for their assessment and grading practices and the factors that influence such practices. In this study, interviews with teachers revealed that decision making about grading was influenced by the desire to use grading practices that encourage student engagement, motivation, and understanding. Most teachers in McMillan and Nash's study

viewed grading as a larger part of philosophy of teaching and learning that needs to accommodate individual differences. Teachers saw the use of non-achievement practices, such as effort, as a way to judge motivation and engagement, while ability and improvement were consistent with broader beliefs about the importance of individual differences amongst students.

Some educators, however, discourage the use of non-achievement factors but place more emphasis on the use of achievement related factors (Airasian, 1994; Popham, 2008; Stiggins, Frisbie, & Griswold, 1989). Arguments raised by these educators are based on the fact that “interpretations of grades can be clearer if grades are limited to measured achievement at a given time, and that it may be impossible to make valid and reliable assessments based on ability, growth, and effort” (Cross, Robert, Frary, & Weber, 1993). They also argued that the use of non-achievement factors has major learning implications particularly on low performing students who may give effort more value over mastery of content and skill attainment (McMillan & Nash, 2000).

Giving students feedback is central to students’ education as it promotes learning and ensures that educational standards are met. Blatt (2005), states that feedback is meant to be a guidance system that keeps students on track on how to learn and master the subject matter. Unfortunately, giving quality feedback to students is a difficult component of teaching such that teachers often avoid this aspect of grading process (Hewson & Little, 1998). For feedback to be effective, it should be prompt, closely follow the event, contain encouragement, be specific about why something was good or not. It should not focus on too many different aspects at the same time. It should be clear, and focus on the work done by the student, and not on the student (Crooks, 1988; Gibbs & Simpson, 2004; Rogers, 2001).

Learners need feedback about their performance to compare with their developing conception of desired performance and training on how to achieve it (Rust, 2005). Teaching learners to monitor their own performance is the ultimate goal of providing feedback. Teacher intentions and uses are realized in instructional planning and other aspects of teaching. Learner intentions to study and use of assessment information to regulate the nature and amount of study are the ultimate goal of schooling, thus fostering motivation to learn and learning itself (Angelo Cross, 2002). When using assessment results, teachers should project students’ confidentiality (Airasian, 1994). Teachers should also be able to use assessment results to make decisions about students’ educational placement, promotion and graduation, as well as, to make judgement about class and school improvement (Stiggins, 1992).

Assessment, according to Carles (2005:44), is the practice of collecting evidence of student learning. It is an integral part of the learning and teaching cycle rather than a separate stage at the end of teaching. It helps to provide information for both learners and teachers to improve learning, hence the term assessment for learning. Carles (2005:47) highlighted a number of practices that encourage assessment for learning, foremost of which is the development of school assessment policies, including more diversified modes of assessment and reduction in tests and examinations. Assessment for learning also requires a focus on feedback to inform learners of their strengths and how to address their weaknesses. The importance of opportunities to make assessment collaborative with learners or to allow them to carry out peer- or self-assessment is also emphasized. Assessment for learning further requires that teachers share with learners the goals of learning so that they can recognize the standards they are aiming for. The use of assessment that probes higher-order thinking skills, creativity and understanding rather than rote memorization of so-called “facts” is an important component of assessment for learning (Kotze, 2002).

A thread running through assessment for learning principles is that they are focused on teaching and learning rather than on the traditional concept of assessment as measurement. Their basis within current learning theories includes, for example, Shepard’s (2000) social constructivist framework of assessment for learning and a warning that externally imposed testing for accountability discourages thoughtful assessment for learning classroom practices. In similar vein, Black (2001:19) placed formative assessment within approaches to learning that emphasize constructivism, situated cognition and social discourse.

Badders (2000:67) highlighted certain issues that need to be addressed in the development and use of classroom assessment tools. Key among these are purpose and impact, referring to how the assessment would be used and how it would influence instruction and the selection of curriculum. Second is the concept of validity and fairness, referring to whether assessment measures what it intends to measure, allowing learners to demonstrate both what they know and are able to do. Assessment methods also require reliability, namely whether the data that is collected is reliable across applications within the classroom, school, and district. It is important to clarify whether assessment addresses content and skills that are valued by and reflect current thinking in the field (Kanjee, 2009). Lastly, efficiency plays a major role as it refers to whether the method of assessment is consistent with the time available in the classroom setting. Badders (2000:69), categorized assessment into three stages: baseline

assessment, formative assessment and summative assessment. Baseline assessment establishes the starting-point of the learner's understanding; formative assessment provides information to help guide the instruction; and summative assessment informs both the learner and the teacher about the level of conceptual understanding and performance capabilities that the learner has achieved. McAlpine (2002), supported this by highlighting that the wide range of targets and skills that can be addressed in classroom assessment requires the use of a variety of assessment formats.

It is essential that assessment instruments and procedures are appropriate to the intensity and the nature of the support needed by the learner; hence the importance of paying attention to the artefacts used in assessment. The result of such assessment could then be used to develop support programmes. Brookhart (2001:163) proposed a model of teachers' assessment of learners that lists eight evaluation processes, the seventh of which is providing feedback. Formative assessment is considered from the teacher's point of view in definitions that emphasize the intention of providing feedback on performance that is used for learning. Indeed, Brookhart (166) distinguished between feedback information about performance supplied to learners by the teacher, and self-monitoring information about performance from learners' own appraisal of their work.

Bloxham and West (2004:722) highlighted that peer assessment has emerged because of the opportunity it provides for learners to participate. Active engagement with assessment criteria during peer marking is seen as beneficial in helping learners understand how they will be assessed by teachers. In addition, various writers stress the importance of student involvement in constructing marking criteria (Smith and Gorard, 2005; Nicol and Macfarlane-Dick, 2006). Furthermore, William et al. (2004) encouraged teachers to use strategies and techniques such as rich questioning, comment-only marking and sharing criteria with learners, student peer assessment and self-assessment. In contrast, Gilmore (2002:345) highlighted assessment strategies which would define or improve assessment practices, such as using a variety of assessment tasks and techniques to cover all children's strengths; the need for short, simple, specific tasks; a greater use of resources such as photographs, pictures and newspapers; using manipulative, visual and audio tasks; and the teaching and practice of problem solving. Other strategies include using group work for teaching and assessment; developing questioning skills for children and teachers; and using cameras and video recorders (Gilmore, 2002:343).

It is clear that different kinds of information must be gathered about learners by using different types of assessments for measuring a variety of aspects of student learning, conceptual development, and skill acquisition and application. The use of a diverse set of data-collection formats will yield a deeper and more meaningful understanding of what learners know and are able to do, which is the primary purpose of assessment.

O'Brien (2000) supported the notion that teachers can use whatever methods are appropriate for specific learners. This statement acknowledges that learners have different capabilities and that no single technique can be appropriate for all, at all time. As Killen (2003:33) posits, however, any strategy chosen should be based on desired outcomes to be attained by learners. It would also include constructed or extended-response items that require students to apply their knowledge in using or interpreting maps. Analysis and synthesis skills are tested for higher levels (Guskey, 2005).

Table 6: Tabular Structure of Table of Specifications for Formative Classroom Assessment.

Terms	Table of Specifications					
	Knowledge of;			Translation	Application	Analysis & Synthesis
	Facts	Rules & Principles	Processes & Procedures			

Source: Adapted from Guskey (2005)

Guskey's test blueprint format presented offers a wide range of cognitive skills to be enhanced, making it more useful as a learning tool. The test blueprint makes a classroom assessment become more thorough, complete, and effective at serving their formative purposes (Guskey, 2005). The format indicates a progressive learning spanned in the hierarchy of cognitive levels that is from Lower-Ordered Thinking Skills (LOTS) to Higher-Ordered Thinking Skills (HOTS). Students cannot excel in the high-level items unless they know the requisite facts and principles. These students need to return to activities that help them gain this basic knowledge. In this strategy, teachers could make students reach mastery and or proficiency in the subject matter.

Classroom summative assessments have a judgmental purpose given during terminating examination, which is sometimes called accountability-oriented classroom assessment.

Assessments should be valid so that the results and observations could be used to drive planning for corrective instruction and decision-making (Stiggins, 2008; Shephard, 2001).

Table six, ensures that the test measures an adequate sampling of the class content at the cognitive level, the amount of class time spent on each objective is mapped, along with the cognitive level at which each learning objective (LO) is taught thereby helping teachers to identify the types of items they need to include on their tests. Thinking skill which emphasizes recall, memorization, identification, and comprehension, is typically considered to be at a lower level. Higher levels of thinking include processes that require learners to apply, analyse, evaluate, and synthesize (Fives et al., 2013).

Fives and colleagues (2013) believe to the premise that topics that were discussed longer or in greater detail should appear in greater proportion on the test, giving a direct relation between the amount of class time spent on the objective and the portion of the final assessment testing that LO. The information about the ‘Day No.’, the ‘Instructional Objectives’, and the ‘Time Spent on the Topic’ are taken directly from the teacher’s lesson plans and reflective notes. The ‘Percentage of Class Time on Topic’ is a percentage calculation which reflects the percent of total class time for the unit of study that was spent on each LO. The ‘numbers of Test Items’ is the professional decision made by the teacher. The remainders are used to determine how many test items (of equal value) should be used to assess each LO. The teacher must also decide whether the LO should be tested either at a low or high cognitive level of learning. A teacher must decide which type of question to use to assess each LO at the correct level (Fives et al., 2013), brings up an important point about constructing classroom tests. Every LO does not need to be assessed in every assessment. A test blueprint can help you make sure that the most relevant LO’s are assessed and that a sample of less prominent ones are also included. A student when preparing for a test studies everything and gains an understanding of the content. What can actually be assessed is only a sampling of the students’ knowledge at a particular point (Fives et al., 2013).

Table 7: Tabular Structure of Test Blueprint for Summative Classroom Assessment

	Instruct ional Objecti ves	Time Spent on Topic (minutes)	Percent of Class Time on Topic	Number of Test Items: 10	Lower Levels -Knowledge -Recall -Identification -Comprehension	Higher Levels -Application -Analysis -Evaluation -Synthesis
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Day No					Mark and Type of Test	
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Source: Adapted from Fives et al. (2013)

Table 7 presented the two-level analysis of a test blueprint designed by Alias (2005). The first level of analysis covers the following: (i) Construct a two-way table with a list of topics in the first column and a list of cognitive emphases in the first row, (ii) Identify the topics/sub-topics and the corresponding cognitive emphasis to be tested, and (iii) Estimate the percentage allocation for each topic. The second level of analysis incorporates the following: (i) Choose the appropriate item format (multiple choice, (MC)/structured question (SQ)/long question or essay (LQ), etc.) for the specific objective, (ii) Determine the number of questions for each specific Objective, and (iv) Check that the marks for each topic match the total weight allocated.

Table 8: Tabular Structure of Test Blueprint for Summative Classroom Assessment

Content	Cognitive Emphasis			Total (Content)
	Knowledge & Comprehension	Application & Analysis	Synthesis & Evaluation	
Main Topic	%	%	%	%
Sub-Topic 1	-	Item Format @ Mark each	Type of Exam @ Mark each	%
Sub-Topic 2	Type of Exam @ Mark each	Type of Exam @ Mark each	-	%
Total (Cognitive Emphasis)	%	%	%	%

Suah and Ong (2012) conducted a study on 406 teachers stated that teachers might give importance to the kind of assessment that is suitable for teaching on a given day. In addition, most teachers have rarely used the test-setting tables to build test items. The main source of reference used by most teachers when constructing test questions is textbooks. This is followed by the use of reference books and questions from public examinations. In addition, it is found that teachers are more committed to the various forms and homework assignments to evaluate pupils' learning. Test questions are usually at a low level of understanding, which is

based on Bloom's Taxonomy followed by application level, knowledge, analysis, assessment and synthesis.

Investigations of teachers' assessment practices revealed that teachers were not well prepared to meet the demand of classroom assessment due to inadequate training (Goslin, 1967; Hills, 1991; O'Sullivan & Chalnack, 1991; Roeder, 1972). Problems were particularly prominent in performance assessment, interpretation of standardized test results, and grading procedures. When using performance measures, many teachers did not define levels of performance or plan scoring procedures before instruction, nor did they record scoring results during assessment (Stiggins & Conklin, 1992). In terms of standardized testing, teachers reported having engaged in teaching test items, increasing test time, giving hints, and changing students' answers (Hall & Kleine, 1992; Nolen, Haladyna, & Haas, 1992).

Teachers also had trouble interpreting standardized test scores (Hills, 1991; Impara, Divine, Bruce, Liverman, & Gay, 1991) and communicating test results (Plake, 1993). Many teachers incorporated non-achievement factors such as effort, attitude, and motivation into grades (Griswold, 1993; Hills, 1991; Jongsma, 1991; Stiggins et al., 1989) and they often did not apply weights in grading to reflect the differential importance of various assessment components (Stiggins et al., 1989). Despite the aforementioned problems most teachers believed that they had adequate knowledge of testing (Gullikson, 1984; Kennedy, 1993) and attributed that knowledge to experience and university coursework (Gullikson, 1984; Wise, Lukin, & Roos, 1991).

Teachers' concern about the quality of classroom assessment varied with grade levels and slightly with subject areas (Stiggins & Conklin, 1992). There was an increased concern among teachers about the improvement of teacher-made objective tests at higher-grade levels; Mathematics and science teachers were more concerned about the quality of the tests they produced than were language teachers. Higher-grade level mathematics teachers were found to attach more importance to and use more frequently homework and teacher-made tests in classroom assessment than lower-grade level teachers (Adams & Hsu, 1998).

Two points are noteworthy about the existing literature. First, assessment practices and assessment skills are related but have different constructs. Whereas assessment practices pertain to assessment activities, assessment skills reflect an individual's perception of his or her skill level in conducting those activities. Current literature is scarce in simultaneous

investigation of assessment practices and assessment-related perceptions. Secondly, classroom assessment involves a broad range of activities. Teachers may be involved in some activities more than in others due to the nature of assessment specific to the grade levels and content areas they are required to teach.

The American Federation of Teachers (AFT), the National Councils on Management in Education (NCME) and the National Educational Association (NEA) (1990), issued standards for teacher competences in Educational Assessment of students. According to the standards, teachers should be skilled in choosing and developing assessment methods, administering and scoring tests, interpreting and communicating assessment results, grading and meeting ethical standards in assessment. Although the existing literature has suggested that grade levels and subject areas may account for some variations in classroom assessment (Adams & Hsu, 1998; Stiggins & Conklin, 1992), none of these studies, however, has covered sufficiently the broad spectrum of classroom assessment. Further research addressing teachers' characteristics and school environment on assessment practices and content areas is desirable to strengthen the current literature on classroom assessment. These two points provide the rationale for this study. The primary purpose of this study is to investigate the influence of teachers' characteristics and school environment on the implementation of classroom assessment practices. Classroom assessment has received increased attention from the measurement community in recent years. Since teachers are primarily responsible for evaluating instruction and student learning, there is a widespread concern about the quality of classroom assessment.

Literature on classroom assessment has delineated the content domain in which teachers need to develop assessment skills (e.g., Airasian, 1994; Carey, 1994; O'Sullivan & Chalnack, 1991; Schafer, 1991; Stiggins, 1992, 1997). The current consensus has been that teachers use a variety of assessment techniques, even though they may be inadequately trained in certain areas of classroom assessment (Hills, 1991; Nolen, Haladyna, & Haas, 1992; Plake, 1993; Stiggins & Conklin, 1992). Classroom assessment embraces a broad spectrum of activities from constructing paper-pencil tests and performance measures, to grading, interpreting standardized test scores, communicating test results, and using assessment results in decision-making. When using paper-pencil tests and performance measures, teachers should be aware of the strengths and weaknesses of various assessment methods, and choose appropriate formats to assess different achievement targets (Stiggins, 1992).

Test items should match with course objectives and instruction to ensure content validity (Airasian, 1994), reflect adequate sampling of instructional materials to improve test reliability, and tap higher-order thinking skills. In performance assessment, validity and reliability can be improved by using observable and clearly defined performance tasks (Airasian, 1994; Baron, 1991; Shavelson, Baxter, & Pine, 1991; Stiggins, 1987), detailed scoring protocols, multiple samples of behaviours evaluated by several judges (Dunbar, Koretz, & Hoover, 1991), and recording scoring results during assessment (Stiggins & Bridgeford, 1985). Teachers should be able to revise and improve teacher-made tests based on test statistics and item analysis (Carey, 1994; Gregory, 1996).

Grading and standardized testing are two important components of classroom assessment. Since grade-based decisions may have lasting academic and social consequences (Messick, 1989; Popham, 1997), teachers should weigh assessment components according to instructional emphasis (Airasian, 1994; Carey, 1994; Stiggins, Frisbie, & Griswold, 1989) and base grades on achievement-related factors only. Grading criteria should be communicated to students in advance and implemented systematically to handle regular as well as borderline cases (Stiggins et al., 1989). Non-achievement factors such as effort, ability, attitude, and motivation should not be incorporated into subject-matter grades because they are hard to define and measure (Stiggins et al., 1989). In terms of standardized testing, teachers should avoid “teaching to the test” (Mehrens, 1989), interpreting test items, and giving hints or extra time during test administration. Teachers should appropriately interpret test scores and identify diagnostic information from test results about instruction and student learning (Airasian, 1994).

Communicating assessment results and using assessment information in decision-making constitutes two other aspects of classroom assessment. To communicate assessment results effectively, teachers must understand the strengths and limitations of various assessment methods, and be able to use appropriate assessment terminology and communication techniques (Schafer, 1991; Stiggins, 1997). Specific comments rather than judgmental feedback (e.g., “fair”) are recommended to motivate students to improve performance (Brookhart, 1997). When using assessment results, teachers should protect students’ confidentiality (Airasian, 1994). Teachers should also be able to use assessment results to make decisions about students’ educational placement, promotion, and graduation, as well as to make judgment about class and school improvement (Stiggins, 1992).

In 1990, the American Federation of Teachers (AFT), the National Council on Measurement in Education (NCME), and the National Education Association (NEA) issued Standards for Teacher Competence in Educational Assessment of Students, which are currently under revision. According to the standards, teachers should be skilled in choosing and developing assessment methods, administering and scoring tests, interpreting and communicating assessment results, grading, and meeting ethical standards in assessment. The assessment literature and the seven standards form the theoretical framework for the investigation of teacher s' assessment practices and skills in this study.

2.1.6.2. Teacher's Assessment Practices

In 1989, the Buros Institute held a symposium titled, "Are our school teachers adequately trained in measurement and assessment skills?" This resulted in an edited volume of papers (Wise, 1993) on the topic on what pre-service teachers are taught about measurement, what they should be taught, what they actually know, and the observed quality of their assessment practices. Current efforts to develop performance assessments for beginning teachers show promise in ensuring that teachers enter the profession with the necessary qualifications, regardless of their preparation route to the classroom. The core purpose of teacher assessment and evaluation should be to strengthen the knowledge, skills, dispositions, and classroom practices of professional educators. This goal serves to promote student growth and learning while also inspiring great teachers to remain in the classroom. Comprehensive systems of continuous teacher education and professional growth help teachers master content, refine their teaching skills, critically analyse their own performance and their students' performance, and implement the changes needed to improve teaching and learning.

Three methods have been used to investigate teachers' knowledge and use of assessment: surveys of teacher attitudes, beliefs, and practices; tests of assessment knowledge; and reviews of teachers' assessments themselves.

Most studies have concluded that teachers need more instruction in assessment (Marso & Pigge, 1993).

The following chart identifies how a successful teacher assessment and development process could proceed. It is also designed to help NEA members and affiliates take proactive leadership in redesigning policies, programs, and processes for teacher growth

Table 9: Teacher Assessment and development process

PURPOSE:	Improve teacher practice in order to improve student learning}
PREREQUISITES:	Before becoming a teacher-of-record, every teacher must demonstrate subject-area} knowledge, pedagogical knowledge, and professional teaching ability.
STEP ONE:	Provide high-quality professional development for every teacher based on state} standards, district and school learning goals, and identified needs of students and teachers. Assess outcomes of professional development.} Support teachers’ new knowledge and skills.}
STEP TWO:	Conduct ongoing, formative assessments of teachers’ skills, knowledge, and practices.} The assessments should inform teacher growth and development. Assessments may be conducted by administrators, mentors, coaches, teachers themselves, or teachers’ peers. Criteria should include evidence of student learning and feedback from parents and students
STEP THREE:	Provide individual and school wide professional education based on formative} assessment results. If results of formative assessments are positive, then professional education should} include self-directed learning and professional development. Ideally, it should be offered as part of a professional learning community or other supportive system. If results of formative assessments identify significant shortcomings, then professional development and intensive intervention should focus on areas in need of improvement and should be sustained for a significant period of time.

STEP FOUR:	Conduct summative evaluation of each teacher. This should be done at relatively frequent intervals for new or probationary teachers and less frequently for non-probationary continuing contract teachers. Summative assessments of a particular teacher may become optional if formative assessment of that teacher remains positive over a reasonable period. Teachers who need to improve to meet quality standards should receive intensive intervention, support, and individualized professional development.
STEP FIVE:	Implement evaluation results. Inform teachers of evaluation results and the impact on continued employment status, tenure, license renewal, and career ladder opportunities for high performers.
STEP SIX:	Conduct a comprehensive internal and external examination of the teacher evaluation and development process. The school and district should conduct the examination in partnership with teachers and their representatives. The purpose is to identify workforce needs and support ongoing professional development.

Adapted from Teacher Assessment and Evaluation, (ERIC)

A comprehensive teacher assessment and evaluation system should have two distinct components: 1) ongoing, consistent, formative assessments of performance for the sole purpose of fostering professional growth and improved practice; and 2) periodic summative evaluations of teacher performance for the purpose of approving continued employment. These two assessment components should share the same standards for growth and performance. However, they must remain distinctly separate from one another. Teachers' engagement in formative, ongoing assessment to improve their practice should involve neither threat of punishment nor promise of reward.

Assessments should occur on a regular basis. Formative assessments should also facilitate interaction and feedback among colleagues. They should allow peer, mentors, and professional coaches to provide teachers with feedback about their practice and engage

teachers in learning processes that are free from employment-related decisions. Formative assessments may also use student learning measures to inform teachers of student progress and thereby help to improve student learning. Summative evaluation of performance for the purpose of authorizing continued employment should occur at appropriate time intervals that comply with local bargaining agreements or state statutes.

Where collective bargaining does not exist, criteria for summative evaluations should be developed cooperatively with administrators, teachers, and teacher associations. Summative evaluations must be based on a clear set of performance standards that are identical to standards used in the ongoing formative process. They must employ a rubric of criterion-referenced assessments, in which teachers either do or do not meet acceptable standards of practice. Teachers who fail to meet acceptable standards should be offered professional development, remediation plans, and opportunities to observe peers. They should also be given sufficient time, support, and assistance toward meeting the standards.

A process to remove chronically ineffective teachers from the classroom should begin only after extensive support and intervention that guarantees due process measure. Teacher performance can be judged amongst other things by the following; Assessment of teacher practice based on comprehensive standards of practice, which could include classroom observations, administrator evaluations, and teacher-evaluator conferences. Use of portfolios, evidence binders, conference presentations, and instructional artifacts to show demonstrated attainment and use of new knowledge and skills Use of information provided through formative assessments, peer reviews, professional learning communities, and other forms of feedback and support evidence of student growth and learning based on multiple measures.

2.2. Empirical Review

This section studies the efforts made by earlier scholars to answer the research questions. The empirical review will view the following concepts; teacher qualification and the implementation of classroom assessment practices, teaching experience and the implementation of classroom assessment practices, class size and the implementation of classroom assessment practices, teachers' motivation and the implementation of classroom assessment practices, teachers' work environment and the implementation of classroom assessment practices, from the eyes of other scholars.

2.2.1. Teachers' Qualification and the Implementation of Classroom Assessment Practices

One of the emerging ways to gauge teacher's performance is their ability to assess students and evaluate students. Classroom assessment helps to engage the students in their own learning targets such that they are able to keep track of their achievements. Black and William (1998) observe that classroom assessments provide accurate and descriptive feedback to students as well as involve them in the assessment process. Involvement of students in assessment increases learning and motivates students rather than merely measure students' performance. Additionally, both the teacher and student can use classroom assessment information to modify teaching and learning activities. A survey by Ballard and Johnson (2004) on mathematics assessment, confirmed that frequent quizzes do yield benefits. They compared test results of students who were exposed to quizzes with a control group who experience no quizzes. Therefore, the ability of the teacher to evaluate and assess students defines a performing teacher and is likely to be translated to positive student outcomes.

Findings related to teachers' academic degrees (Bachelor's, Master's, doctorate, and others) are in conclusive. Some studies show positive effects of advanced degrees (Betts, Zau, & Rice, 2003; Ferguson & Ladd, 1996; Goldhaber & Brewer, 1997, 2000; Rowan, Chiang, & Miller, 1997); others show negative effects (Ehrenberg & Brewer, 1994; Kiesling, 1984). Some researchers maintain that the requirement for teachers to have a second degree raises the cost, financially as well as in time, of teacher education, which may prevent quality candidates from choosing this profession (Murnane, 1996).

Professional development activities can be conducted by many different organisations, in school and out of school, on the job or during sabbatical leave. During professional development programs, practicing teachers update their content knowledge and teaching skills so they can meet the requirements of new curricula, consider new research findings on teaching and learning, and adapt to changes in the needs of the student population. Criticism has been levelled against the episodic nature of these activities and concern expressed that very little is known about what these activities really comprise and involve.

Conclusions in the literature on the relationship between teachers' participation in professional development activities and student outcomes are mixed. Some studies on in-service professional development have found no relationship to student achievement (see, in

regard to mathematics and reading, Jacob & Lefgren, 2004). Other studies have found higher levels of student achievement linked to teachers' participation in professional development activities directly related to the area in which they are teaching (see, in regards to mathematics, Brown, Smith, & Stein, 1995; Cohen & Hill, 1977; Wiley & Yoon, 1995; and in regard to language and mathematics, Angrist & Lavy, 2001). Wenglinsky (2000) found a positive correlation between professional development activities aimed at the needs of special education students, and students' higher-order skills and laboratory skills in science. More recently, Harris and Sass (2007) identified what they call the "lagged effect of professional development," that is, the larger effect of teachers' professional development on student outcomes not becoming apparent until three years after the teachers had completed their courses.

The interpretation of the positive effect of participation in teacher professional development activities is not clear cut, as this variable is confounded with other teacher attributes, that is, teachers who participate in these activities are also likely to be more motivated and, usually, more specialized in the subjects they teach.

Teachers are usually those who have graduated from accredited teacher education programs. Some of them decide to teach or to complete an induction program or pass a national teacher examination test in order to obtain a license. There is debate in the USA between those in favour of full certification (Darling-Hammond, 1999; Darling Hammond et al., 2001) and those who argue that students of teachers who hold full certification achieve similarly like those who study under teachers with temporary "emergency" credentials (Goldhaber & Brewer, 2000). These authors also argue that relaxing requirements for certification is a way not only of attracting academically talented college graduates to teaching but also of recruiting a more diverse pool of candidates needed for a diverse student population. The TIMSS 2003 data at hand for Israel prevented examination of this issue, as all participating teachers were fully certified.

The subject-matter is the knowledge teachers acquire during their formal studies and pre-service teacher education courses. The evidence from different studies is contradictory. Several studies show a positive relationship between teachers' preparation in the subject matter they later teach and student achievement (Darling-Hammond, 1999, 2000b; Goldhaber & Brewer, 2000; Guyton & Farokhi, 1987), while others have less unequivocal results. Monk and King (1994) found both positive and negative effects of teachers' in-field preparation on

student achievement. Goldhaber and Brewer (2000), found a positive relationship for students' mathematics achievement but no such relationship for science. Rowan et al. (1997), reported a positive relationship between student achievement and teachers with a major in mathematics. Monk (1994), however, found that while having a major in mathematics had no effect on student achievement in mathematics, having a substantial amount of under- or post-graduate coursework had a significant positive effect on students in physics but not in life sciences.

Ingersoll (2003), considered the widespread phenomenon in the United States of teachers teaching subjects other than those for which they had formal qualifications. His study of out-of-field teaching (as it is known) portrayed a severe situation where 42% to 49% of public Grades 7 to 12 teachers of science and mathematics lacked a major and/or full certification in the field they were teaching (1999/2000 data). In Israel, a recent survey (Maagan, 2007) placed the corresponding percentages even higher for elementary teachers 42% for mathematics and 63% for science (2005/2006 data).

The literature shows a somewhat stronger, and more consistently positive, influence of education and pedagogical coursework on teacher effectiveness in assessment (e.g., Ashton & Crocker, 1987). This study compares the effect on student achievement of courses in pedagogical subject matter with the effect of courses in the subject matter itself, and present evidence in favour of the former. Monk (1994), related the study on mathematics achievement. Other studies reveal no impact of education courses on students' achievement (for example, Goldhaber & Brewer, 2000, in relation to science achievement).

Despite evidence that five-year programs result in a higher retention rate and career satisfaction of their graduates than do four-year programs (Andrew, 1990), there is no evidence that graduates of the longer programs become more effective teachers. Data collected in TIMSS 2003, in Israel cannot contribute to this consideration, as the information collected on teachers' pre-service education did not differentiate between consecutive teacher preparation programs at universities (one- to two-year programs taken after completion of the first degree in a discipline) and concurrent programs at teachers' colleges (four- to five-year integrated disciplinary and pedagogy programs).

Ali and Jamaluddin (2007); Darwish, Abdo, & Al Shuwaiee (2018), in their study on teacher classroom assessment practices, said teachers lacks of skills in preparing and practicing Test

Specification Table is one of the causes teachers are having difficulty in building assessment item. Ali (2006), he found that most of the teachers more likely using the question from the examination questions guide years ago, books without change or created their own questions. Alias (2003), went further to explain that Test Specification Table makes sure that all the questions that have been created have a valid high content and must be from the content of the subject that they already learn from their teachers. If the teachers creating test item based on Test Specification Table, assessment will be performant since it will be created following the standard that have been set with the objective, which must be achieved and the lesson content to be assessed. Therefore, objective of the assessment will be achieved. All the teachers need to make the classroom assessment practices right by accepting the challenge. Education can develop student to be well prepared to go through global challenge.

Research from Ali and Jamaluddin (2007), opines that there are few teachers that lack of knowledge and skill in building assessment item. As effect, teachers cannot make their own examination questions (Malaysian Examination Institute, 2014). They also build examination questions without following the Test Specification Table and standard in planning assessment item. This phenomenon is causing teachers to fail in monitor learning progress, weak of learning planning and cannot know the real potentials of students.

2.2.2. Teaching Experience and the Implementation of Classroom Assessment Practices

In 2014, Ontario commissioned the DEPRG report on Regulation 274, which included the statement corresponding to teacher experience and teacher quality. Regulation 274 is an instrument that required teachers to be hired based on seniority rather than on merit. Irvine, 2014 sought to examine the relationship between teacher experience and teacher effectiveness and to investigate the impact of Ontario Regulation. The study utilized constructivist grounded theory (Charmaz, 2014), which makes no priori assumptions about whether a relationship exists between teacher effectiveness and teacher experience, nor the form such a relationship might take. Rather, the grounded theory methodology (known as the constant comparison method) employs an interactive approach of data collection, data analysis, and additional data collection based on this analysis, until data saturation is reached, and no new insights or new properties are generated by further data collection. Constructivist grounded theory employs multi-level coding, proceeding from initial open coding to more focused coding once themes have emerged, to axial coding, which relates coding categories to

subcategories, and finally to theoretical coding that links categories to produce a hypothesis or theory (Noerager Stern & Porr, 2011).

Noerager Stern and Porr (2011) describe grounded theory as a method of seeking an “inductive generalized pathway as opposed to a deductive verificational pathway” (p. 39). Constructivist grounded theory is a particularly appropriate tool for textual analysis (Charmaz, 2014) and well-suited for policy analysis (Richards & Farrokhnia, 2016). Data analysis is continued until no new information or relationships are identified (Sutcliffe, 2016). Constructivist grounded theory resulted in several additional research questions in addition to the principal research question about the relationship of teacher experience to teacher effectiveness. Studies on the effect of teacher experience on student learning have found a positive relationship between teachers’ effectiveness and their years of experience, but the relationship observed is not always a significant or an entirely linear one (Klitgaard & Hall, 1974; Murnane & Phillips, 1981). The evidence currently available suggests that while inexperienced teachers are less effective than more senior teachers, the benefits of experience level off after a few years (Rivkin, Hanushek, & Kain, 2000).

In sharing a narrative perspective on views about grading and giving students feedback Wormeli (2006) contends that “Assessment and feedback, particularly during the course of learning, are the most effective ways for students to learn accountability in their work and in their personal lives” (p. 14). Wormeli stressed the need for teachers to use grading and feedback practices that can best serve the interests of students. Some of the recommendations that Wormeli made were that when grading and giving students feedback, teachers should clearly show what students did, what they were supposed to do, and then help them compare and contrast the two. McMillan (2008) conducted a study to document the differences in actual assessment and grading practices conducted for a specific class taught by teachers across a range of subjects. Results of the study revealed that secondary school teachers use a multitude of factors when grading students work.

A mixture of factors to determine grades were organized into four clearly distinct components: academic achievement, academic enablers (such as effort, ability, improvement, and participation), use of external benchmarks, and use of extra credit and borderline cases). Academic achievement was considered to be the most important process in grading students’ work. Two thirds of teachers who participated in this study were reported to have agreed with the use of academic enablers (effort, ability, and improvement) when grading students’ work.

Teachers defend their choice to use non-achievement factors, such as effort, because they see them as some form of borderline to determine grades; and that such 26 factors are good proxy for student achievement. Both primary and secondary school teachers have been found to use non-achievement factors when they award grades to their students to raise or lower grades except in borderline cases, they were also found to reward hard work by raising borderline grades and some would lower borderline grades for lack of effort (Cross, Robert, Frary, & Weber, 1993).

The relationship between teacher experience and student achievement is difficult to interpret because this variable is highly affected by market conditions and/or motivation of women teachers to work during the child-rearing period. Zhan and Burry -Stock conducted a study to examine a broad spectrum of classroom assessment practices across teaching levels and content areas. They found that the higher the grade levels the more teachers used objective type of items and teachers with assessment training had higher perceived skills in assessment practices even after controlling teaching experience.

Harris and Sass (2007) point to a selection bias that can affect the validity of conclusions concerning the effect of teachers' years of experience: if less effective teachers are more likely to leave the profession, this may give the mistaken appearance that experience raises teacher effectiveness. Selection bias could, however, work in the opposite direction if the more able teachers with better opportunities to earn are those teachers most likely to leave the profession.

In another North American study, Schachter, Spear, Piasta, Justice, and Logan (2016) investigated the effect of teaching experience on language and literacy instruction with 222 early childhood educators who had zero to 36 years teaching experience. This team used the Individualizing Student Instruction (ISI) classroom observation system (Connor, Piasta et al. cited in Schachter et al., 2016), which was adapted to focus on the language and literacy instruction provided in early childhood education settings. Teacher years of experience was found to be negatively associated with the amount of instruction, with less experienced teachers achieving significantly higher scores. A positive relationship between quantity of instruction, and teaching quality/student learning outcomes was assumed and not investigated in this study.

2.2.3. Class Size and the Implementation of Classroom Assessment Practices

Although there is considerable research on the effect of class size on student achievement, there is little empirical information on the relationship between class size and teachers' assessment and grading practices (Locastro, 2001; Reynolds et al, 2001). Class size is an environmental factor that teachers must consider when determining the methods of instruction and when making instructional design decisions.

Class size can impact teacher-student interactions, both quantitatively and qualitatively. It is highly unlikely that in a class of 200 students, one professor would have the ability to spend much time directly interacting with each student. Moreover, those teacher-student interactions will be lacking in quality. The approach a teacher should take in a large class differs from that of a small class. It is important to know whether there is a relationship because some alternative assessment practices (such as performance assessment or observation strategies) can be time consuming for teachers compared to administering and scoring multiple-choice tests.

Slavin (1990) stated in a study that teachers are able to change the way they instruct within their classrooms as a result of reduced classes. Some reasons that teachers gave as positive to having smaller teacher-student ratio include: differentiating instruction more readily, more hands-on lessons, getting to know students better academically, socially and emotionally, which leads to more success academically. Teachers are also able to reflect on old and new strategies when they have fewer students to teach in a day. Blatchford, Goldstein and Mortimore (1998) based their research on the effects of class sizes on teaching. They stated that larger class sizes in the primary grades affect teaching styles, which directly affects students' educational attainment.

Classes are typically considered too large when they do not 'allow teachers to perform a variety of important teaching tasks, such as, developing lesson and unit plans, managing time, space and material to keep students productively involved in learning (Reynolds et al., p,31). The range at which class sizes become too large to meet the academic and non-academic needs of learners is suggested to fall between 15 to 24 students. Thus, large class sizes may be a factor in teachers' decisions as to whether they implement reform-oriented strategies such as alternative assessment. Reduced classes will enable teachers to provide an enhanced educational experience for students that surpass what they can do with a larger number of students in their classes. In the STAR Project (Student/Teacher Achievement Ratio), classes

with fewer students were more conducive to learning, instruction was more individualized and there was more time for teaching and learning. Reduced class sizes will allow teachers to deliver more effective lessons that will enable students to receive a more quality education (Blatchford, Baines, Kutnick, Martin, 2001).

Shapson et al. (1980) as cited by *Çakmak, M. (2009)*, investigated the effects of class size on teachers' expectations; the attitudes and opinions of students and teachers, student achievement in reading, mathematics, composition and art, student self-concept, and a variety of classroom process variables such as teacher-pupil interaction and method of instruction. Sixty-two classes of students in the fourth and fifth grades were selected from 11 schools, with teachers who had at least two years of teaching experience. The data was collected with the use of various research techniques such as paper and pencil measures, standardized achievement tests, and a self-concept scale. In addition, teacher-pupil interaction, pupil participation, pupil satisfaction, method of instruction, subject emphasis, physical conditions, use of educational aids, and classroom atmosphere were observed using an observation schedule.

Overall, findings of the study indicated that small classes offer more flexibility to the teachers compared to the larger classes. Another effect of class size they evoked was related to assessment. The findings of the study conducted by Shapson, Wright, Eason, and Fitzgerald (1980) indicate that teachers believe the evaluation process is different in large and small classes. According to the teachers in the Shapson et al. study, teachers working in class sizes consisting of 16 to 23 students were more satisfied because marking took little time and corrections were immediate, whereas in classes of 30 students marking became more formal, time-consuming, and sometimes delayed. The findings of the study conducted by Korostoff (1998) also support this view. In this study teachers expressed the ease of keeping track of students' achievement, suggesting that the evaluation of students is easier in small classes.

A smaller class size allows teachers to group students with like abilities and needs as well as use creative grouping strategies in order to successfully meet the needs of all their students. Teachers are able to know with more certainty which skills and strategies are being used by individual students because groups are smaller. There is more opportunity to zero in on specific needs for individual students. Teachers state that differentiating literacy instruction is used more often in smaller class sizes as a result of working with fewer students within groups. Because fewer students are in each group, lessons are more exclusive in order to

target specific needs for students. Smaller groups and fewer groups, allow teachers to meet with each group for longer periods of time and more frequently.

Rice (1999) stated, “In addition, the effect of class size on educational outcomes could be a function of the degree to which teachers assigned to smaller classes use time differently than those assigned to larger classes.” The study looked at the ways time was used within classrooms with a reduced number of students, which included the following: how much time was used for instruction, working with small groups, using innovative instructional practices, leading whole-group discussion, amount of homework assigned, non-instructional time, administrative tasks and maintaining order within the class (Rice, 1999). He reported a study of 1995, which went into classrooms and rated teachers’ lessons in both reduced size and regular sized classes. The effect on education depends on the way the teachers use their time and resources while teaching in a reduced class size (Rice, 1999). Teachers reported that they felt that class size affected the way that they taught and their students’ learning (Blatchford, Moriarty, Edmonds & Martin, 2002).

After teacher interviews, they explained that instruction within their rooms took less time because of fewer children and more time spent consistently on task (Johnston, 1989). Teachers are able to monitor students learning more readily in reduced classes. They also were able to give more immediate feedback and re-teaching because they were able to closely monitor their students during lessons, assessments and instruction (Johnston, 1989). Teachers responded that they were able to meet more of their students’ needs within their classrooms and that it was easier to accommodate the range of students within one classroom and differentiate lessons, instruction and assessments (Johnston, 1989).

O’Neill & Mercier (2003), opines that it took less time to transition and pass/collect materials, which allowed more time for instruction and learning throughout the school day. They acknowledged that teachers of reduced class size have more time for instruction, working with behavioural problems, individually knowing their students to better educate them, developing individualized instruction, hands-on activities and developing reciprocal communication with parents and families.

Stasz & Stecher (2000), state that teachers in reduced class sizes spend more individual time with students and that it does affect instruction. Graue & Hatch (2007), study looks at how schools use smaller class sizes to change instructional programs within their classrooms.

There is also the increased ability to reflect on current teaching strategies and change and implement new and more effective methods of teaching (O'Neill & Mercier, 2003).

Research and debate on class size has been focused on students' achievement, there is little relevant research on what mediating classroom processes might involve. In the United States, the debate has centred on the efficacy and cost effectiveness of initiatives to reduce class size. A major worry in the United Kingdom has been that classes at the primary stage are too large and that teaching, learning and children's educational progress can suffer (Goldstein et al, 1998). Grissmer (1999), has concluded that there is lack of coherent theories by which to guide and interpret empirical work on class size effects and with which to make new predictions.

On a logical and common-sense grounds, it seems likely that the greater the number of students in a class, the more time teachers will spend on procedural and domestic matters, such as, taking the registers, lining children up and putting on coats, and dealing with the domestic duties such as toileting, accidents, and so forth (Bassey, 1996), and conversely, the less time teachers will spend on instructive and dealing with individual children. It might be expected to be particularly important to maximise the amount of teaching and individual support for the youngest children in school. This expectation is consistent with teachers' views. In the United Kingdom, Bennett's (1996), account of a survey of teachers and head teachers' view shows that practitioners believe that large class sizes affect teaching and learning and are particularly aware that larger classes could have an adverse effect on the amount of teacher attention. There is very little research on class size and classroom processes.

In a recent study (Galton, Hargreaves, and Pell, 1996), though small-scale, data came from 28 lessons and nine teachers, based on an adopted version of the observation systems used in the earlier ORACLE study. The authors claimed that smaller classes allow more sustained interactions between teacher and child, more time spent on task than on routine management, and more feedback on work. The results are difficult to interpret as they involve only a handful of teachers working under unusual circumstances and for brief periods. Moreover, none of the results reported appear to have reached statistical significance. Molnar et al (1999) report results from interviews and questionnaires in which teachers were asked to rank items according to the extent to which they were affected by reduced class size. The teacher behaviour that received the highest rankings were more individualised instruction, more

teaching time, more discussion, sharing and answering, more hands-on activities and more content coverage. The most important classroom process affected by reduced class size, according to Molnar et al. (1999), is therefore individualisation. He conducted interviews with 28 SAGE teachers which suggested that small classes have reduced problems with classroom discipline and allowed more knowledge of students, more time for instruction and more individualisation, for example, involving more one-on-one help. The 28 teachers put forward a tentative model of teaching in small classes that included three elements; better knowledge of students, more instruction time and teacher satisfaction.

Another source of discussion and debate is the optimal class size for students of different ages or grade levels. Younger students typically require more time, attention and instructional support from teachers. Some educators and experts argue that class size is a more important instructional factor when students are younger, and that the benefits of class sizes diminish as students' age and progress in their education.

Bourke's (1986) research in Melbourne sought to understand the link between reduced class size and improved student achievement, and the teacher practices identified by Glass and Smith (1979; 1980) and Cooper (1989) that produced higher student engagement. The study involved 63 year 5 teachers in 33 government elementary schools (at least two teachers in each school), his study analysed the methods teachers used over a school term, with a minimum of ten observations of each teacher's class. Bourke (1986) set out to determine: 'what are the practices that produce the higher student engagement rate that has been identified as being linked to class size and to achievement? What methods do teachers use when individualising instruction that they do not use, or use frequently under grouped or whole class instruction? What form does the greater attention given to students in smaller classes take?

The classes ranged from 12 to 33 students per teacher with a mean of 25.2 taking student, school and teacher variables, along with class size as independent variables, only student ability and class size were directly linked to achievement. He concluded that different pedagogies in classes of different sizes caused variations in achievement. In larger class sizes teachers use class groupings and these classes had lower achievement, while in small classes it was more common to teach the whole class. There was a greater use of homework, assignments and oral tests for assessment purposes in smaller classes. The amount of time teachers spent directly interacting with students and monitoring students work, was directly

related to class size. More direct interaction occurred in smaller classes, whereas, teachers lectured or explained more in larger classes. Finally, larger classes had fewer interactions overall between teacher and students, had higher noise levels, required more management time than smaller classes, and the time spent in this way did not assist student learning.

2.2.4. Teachers' Motivation and the Implementation of Classroom Assessment Practices

The topic of teacher motivation deserves particular study because the role of the teacher is paramount both in the lives of individual students and in the greater society. Teachers are in a position of high expectations but often work in environments that are not conducive to meeting their basic psychological needs for autonomy, competence, and relatedness. Researchers have been working on an instrument called the Work Task Motivation Scale for Teachers (WTMST) (Fernet, Senecal, Guay, Marsh & Dowson). The authors propose that rather than evaluating teacher motivation in a global way with respect to teaching, more accurate and valuable information may be gathered by evaluating motivation with respect to particular work tasks associated with teaching. The study cited here was designed to test the validity of the WTMST.

The WTMST is based on Deci and Ryan's self-determination theory. It is intended "to assess the constructs of intrinsic motivation, identified introjection and external regulations and a motivation toward six work tasks (i.e., class preparation, teaching and evaluation of students, class management, administrative tasks, and complementary tasks)". By "complementary tasks" the authors mean such tasks as tutoring, involvement in extra-curricular activities, and other activities outside the classroom. The authors of the WTMST instrument found that there was value in multi-task approach. In their words, "the assessment of motivation at the multi-task level opens an important door to a deeper understanding of teachers' motivational processes. In fact, some teachers' motivational components do not seem to be limited to uni-faceted and stable representations such as a global contextualized motivational orientation but rather represent important dynamic entities that may be operative and responsive to particular tasks". This may have implications for the design of interventions in situations where teachers are struggling to stay motivated.

Obiageli et al, (2020), investigated the influence of motivation on teachers' effectiveness in Ilorin West Local Government Area of Kwara State. This study adopted a descriptive survey design. The population comprised 150 randomly selected school principals and teachers from sampled schools across Ilorin West Local Government Area of Kwara State. Random

sampling technique was used to select the sample for the study. The instrument that was used for collecting data for this study was adopted from Ayuba (2017) titled Motivation and Teachers' Effectiveness. They concluded that there was no significant relationship between motivation and teachers' effectiveness.

Research conducted with primary and secondary school teachers in Manchester (U.K.) seems to support this notion (Brown, Ralph and Brember). Using an 'illuminative' approach, the authors conducted a series of focused interviews with teachers in order to describe some of the complexities involved in teacher stress. Again, the frequency of events was seen to be more influential than their intensity, although in this study it was the frequency of negatively framed events that was identified as a source of stress. "It would seem to be the insidious day-to-day classroom interactions as a source of stress with their cumulative effect and not the occasional intense sources of stress that teachers are most concerned about". Pupil behavior was dealing with the personal problems of pupils were identified as stressors for these teachers, a common theme in the research on teacher motivation. The teachers in the Manchester study also expressed frustration at the increasing workload and non-teaching demands on their time, which have diminished their ability to do their job well. This combined with higher and higher expectations from the greater society has resulted in a situation in which these teachers find it difficult to cope. The two highest ranking responses were related to pupil behavior and workload, followed by the financial considerations of salary and cost of training.

Bowen (2000) states that reward systems date back to the 18th century when Taylor perceived and advanced theories and concepts of the economic man. He argued that man is predominantly motivated by economic gain and therefore the prospect of more pay is sufficient to bring about an increase in the desired performance.

Mertler (1992) opines that satisfied teachers are generally more productive and can influence students' achievement. Motivation guides people's actions and behaviours toward achievement of some goals (Analoui, 2000). In work and other contexts therefore, motivation is often described as being intrinsic or extrinsic in nature (Sansone & Harackiewicz, 2000). Akinyi (2015) argues that employees' motivation is as the psychological force that determines the direction of person's behaviour, level of effort and level of persistence in an organization. Beardwell (2004) further claims that the use of money as a motivator linked to various objectives would offer the best motivation for performance. For this reason, employees should

be motivated by obtaining the highest possible wages through working in the most efficient manner possible thereby satisfying the employee and the employer.

According to Mathis and Jackson (2009) performance is associated with the quality and timeliness of output, presence attendance at job, efficiency with which the work is completed and effectiveness of the work completed. In this respect, teacher performance connotes the teacher's role of teaching students effectively and efficiently in class and outside the class. The key aspects of teaching involve the use of instructional materials, teaching methods, regular assessment of students, making lesson plans, assessment of pupils, conduct in fieldwork, teachers' participation in sports, attending school assembly and guidance and counselling. Teacher motivation has become an important issue given their responsibility to impart knowledge and skills to learners.

2.2.5. Teachers' work environment and the implementation of classroom assessment practices

Ingersoll and Smith (2003) found out that, 50 percent of teachers leave their profession within the first five years. This is due to the poor working environment associated with teaching. Hess (2006) supported this fact by saying that inadequate resources limit effectiveness and affect teachers' decision on teaching. Most secondary schools in Cameroon have unconducive learning environment, the basic amenities are not there and this has a lot of effect in demoralizing the strength of so many teachers. According to Ndongko and Tambo (2000) Lack of school resources, lack of didactic materials and overcrowded classes are some of the challenges affecting teachers in Cameroon. Improving the working environment of teachers might attract the top college graduates to teaching and also slow the rate of teacher attrition (Ingersoll, 2003). Many teachers quit because of poor working environment. Hasty (2007) found out that, higher stress levels are associated with stronger intentions of teachers to leave their profession. According to Tambo (2003), teachers at all levels in Cameroon are not satisfied with their working environments which are below expectation when compared with their counterparts in different occupations. This is in conformity with the two-factor theory stipulated by Herzberg (1959).

According to this theory, motivational factors are called satisfiers. These factors motivate the employees for a superior performance. Looking at the case of Cameroon, teachers are dissatisfied. Furthermore, the study revealed that, poor working environment to a high extent influences teachers' attrition. Working environment is an important factor in the decision-making process of individual teachers to stay or leave the profession. When teachers' working environments are not conducive, they might not have the interest to stay in that work place. This is also supported by

Acom (2010), who found out that, there is a very strong positive relationship between teacher working environment and teacher retention. Results from the interview conducted in this study revealed that there are no adequate teaching and learning materials in our schools. Tapper (1995), found out that most teachers do not have enough textbooks and instructional materials to facilitate teaching. They use their money to photocopy school materials. Aubry (2010), found out that, an influential factor that would lead to highly effective teachers' willingness to remain in teaching is school facilities and resources.

To date, NSAG's have refused to abide by calls to bring the boycott on schools, originally proposed to apply pressure to the government, to an end. Less than a year after their initial implementation in 2016, the boycotts were seen as counterproductive in August 2017. NSAGs have resorted to intimidation, abductions, arson, and violence to enforce a ban on education. Proponents of education, including principals, teachers, parents, and school children seeking to learn, are perceived as enemies to the NSAG's cause and are as subject to attack as the governmental forces they fight against. Between February 2017 and May 2018, at least 42 schools were attacked, two principals kidnapped, and three teachers killed.

Between January 2018 and June 2019, more than 300 students and teachers were abducted. More than 260 separate security incidents were committed between January 2018 and September 2018, including armed conflicts between NSAGs and governmental security forces, kidnappings and violence against civilians by NSAGs, and the destruction of private property by both sides (Amnesty International, 2018). On October 24, 2020, at least 7 children were killed and 13 injured while they attended school at Mother Francisca International Bilingual Academy in Kumba in the South West Region of Cameroon; they were between 9 and 12 years. Not only does the violence show little sign of abatement, the recent attacks perpetrated in late 2020 also suggest that the nature and the severity of these acts are becoming increasingly heinous.

Upon his visit to Minawao camp in Northern Cameroon, Filippo Grandi, the head for the UN High Commissioner for Refugees in 2016 said: "I am convinced that education is the most important investment that we have to make in the Lake Chad region now and in the future to avoid a repeat of the events and of the horrible abuses of the last years".

CHAPTER THREE: METHODOLOGY

There was need for a proper research methodology to ascertain the literature. This chapter focuses on explaining in detail the procedure followed by the researcher to carry out this study. It investigates the different research methods, the research design, the area of study, population, the sampling procedures used, the sample, the different research instruments and the validity and reliability of the instruments, how the instruments will be administered, the procedure for data analysis and the ethical considerations put in place to ensure acceptability.

Research methodology refers to the systematic process of solving a research problem (Sahu 2013), as cited by Enow, 2018. It generally involves various steps followed by researchers in studying research problems following logical sequences. To carry out research different researchers adopt different approaches and the approach adopted depends on the type of research and the objective of the study. There are two main types of research approaches: the qualitative and the quantitative approach. Quantitative approach involves the generation of data in quantitative form which can be subject to rigorous quantitative analysis in a systematic and rigid fashion (Kothari 2004). The qualitative approach on the other hand is mainly concerned with subjective assessment of the respondent. It is mainly concerned with attitudes, opinions, behaviours and impressions. The qualitative approach seeks to understand situations in their uniqueness as part of a particular context and the interactions there (Merriam 2002). This understanding is an end in itself and not an attempt to predict what may happen in the future necessarily, but to understand the nature of that setting, what it means for participants to be in that setting, what their lives are like, what's going on for them. This study used the two methods, that is, the quantitative and qualitative approaches, increasingly known as the mixed-method design.

3.1. Research Design

According to Trochim (2005), research design ‘provides the glue that holds the research project together, a design is used to structure the research, to show all of the major parts of the research project work together to try to address the central research questions.’ The research design is just like a recipe. Just as a recipe provides a list of ingredients and the instruction for preparing a dish, the research design provides the components and the plan for successfully

carrying out the study. The research design is the ‘backbone’ of the research protocol. A research design is the research overall guide for solving the research problem through answering the different research questions, that is, data collection method, data analysis, interpretation and recording of findings and conclusions. The type of design used is determined by your research problem. This study will use the mixed method research design.

According to Johnson et al (2007), a mixed method of research is the type of research in which the researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g use of qualitative and quantitative viewpoints, data collection analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration. Mixed methods research can have three different drives, as formulated by Johnson et al. (2007, p. 123), and includes; qualitative drive, the quantitative drive and the equal status drive. This study will use the quantitative dominant (or quantitatively driven) mixed methods research which is the type of mixed research in which one relies on a quantitative, post-positivist view of the research process, while concurrently recognizing that the addition of qualitative data and approaches are likely to benefit most research projects, (p. 124).

Denzin (2010) takes the broadest perspective in this issue in his article in which he addresses the issue of the incompatibility of paradigms and the implication of this potential incompatibility for mixed methods. He criticizes those mixed methods scholars who make claim to the use of the pragmatic paradigm as the solution to the incompatibility problem on the basis that they are misinterpreting the pragmatic philosophy and its implications for methodology. Instead of following the pragmatic philosophy, he asserts that such scholars have adopted a “what works” form of pragmatism that obviates the need to address the fundamental differences in the assumptions that constitute the paradigms that have been associated with quantitative and qualitative methods, that is, the post-positivist and the constructivist. He also criticizes mixed methods approaches that he perceives, as supporting a methodological hierarchy in which quantitative methods dominate qualitative methods.

Denzin, proactively suggests that qualitative researchers have an ethical responsibility to change the world to further social justice. Thus, he proposes that a moratorium be declared on discussions of mixed methods designs and typologies in favor of pursuing a discussion on how researchers can contribute to the creation of social change. This raises several questions: Is the role of all qualitative researchers and all mixed methods researchers to change the

world? This would depend on the beliefs that the researcher holds. Is it only possible to create this change by starting mixed methods within a qualitative interpretive framing?

Howe (2012), takes on the challenge of exploring various conceptions of mixed methods and their implications for the role of triangulation in the context of determining causation. The first is the disjunctive conception in which different roles are assigned to quantitative and qualitative methods. For example, the National Research Council (Shavelson & Towne, 2002) took the position that qualitative methods are for discovery and quantitative methods are for testing causal relationships. He challenges this conceptualization of the roles for quantitative and qualitative data by introducing the concept of Agential causation (A-causation), which rests on the assertion that people act in intentional ways and that researchers can capture the complexity of collective intentionality that leads to the construction of social facts when combined with certain knowledge, skills, and dispositions. Howe reaches the somewhat controversial conclusion that the establishment of A-causation places the role of quantitative experimental methods in the role of description and the qualitative interpretive methods in the role of providing causal explanations because they can answer the “why” question. He labels this position as mixed methods interpretivism.

Howe’s (2012) second conception of mixed methods is conjunctive mixed methods and involves triangulation based on the integration of quantitative and qualitative data, not merely to look at agreement or disagreement between the data sets, but to put the data into a more comprehensive explanatory framework. Howe uses a second type of causation as a basis for framing the role of triangulation in mixed methods research. He describes Mechanical causation (M-causation) as that which can be asserted by controlling for extraneous variables and testing the relationship between an independent and dependent variable. Such knowledge can be used as a basis for legal action, as well as for a revision of the ethical codes for the conduct of research.

Flick et al. (2014) describe those research issues that support the use of mixed methods as those that require a triangulation of perspectives to understand a complex problem. In their study, the authors acknowledge that a constructivist paradigm precedes the framing of the research issue. How did the constructivist positioning influence the development of the research problem? Do they make the assumption that research issues emerge without a paradigmatic lens that influences the form that they take? Would researchers who start from different paradigmatic stances formulate the same kinds of research questions? This might

lead to additional queries about justifying the use of mixed methods based on the type of research question. Torrance (2017) draws on the literature from sociology, program evaluation, and qualitative methods to support his argument that mixed methods research could benefit from increased use of triangulation in the form of the involvement of respondents in the interpretation of quantitative and qualitative data, especially as a means to address issues of power. Torrance argues that mixed methods researchers should give priority to the use of qualitative methods in order to engage more deeply with research participants in setting the research agenda, developing questions, and constructing reports of the inquiries. His position is commensurate with that of scholars from marginalized groups, such as Chilisa's (2012).

This method will be used to obtain complementary data on the same topic, so as to better understand the research problem, that is, used to expand quantitative results with qualitative data.

3.2. Area of Study

This study is carried out in Cameroon. Cameroon falls along the boundary between West Africa and Central Africa, is a mixture of desert and plains in the North, mountains in the central regions, and tropical rain forests in the South. Cameroon is triangular in shape and is bordered by Nigeria to the Northwest, Chad to the Northeast, the Central African Republic to the East, the Republic of the Congo to the Southeast, Gabon and Equatorial Guinea to the South, and the Atlantic Ocean to the Southwest.

The center region is the intellectual capital of Cameroon. Primary and secondary schools are fairly widespread and easily accessible to most of the population. Primary schools are, however, more widely distributed, even in smaller villages. Secondary schools are less common, but most students are able to travel to the larger towns where such schools are located relatively easily. Along its western border with Nigeria are mountains, which include the volcanic Cameroon Mountain, the highest point in West Africa at 13,451 feet (4,100 meters). Lying wholly within the tropics, the country is hot throughout the year; mean annual temperatures range between the low 70s and low 80s F (within the 20s C), although they are lower in areas of high elevation. The incidence of precipitation depends largely on the seasonal movements of two contrasting air masses.

The first is a dry continental tropical air mass, which originates over the Sahara and is associated with hot, dusty weather. The second is a warm and humid maritime tropical air mass that originates over the Atlantic and brings rain-bearing winds. Precipitation decreases from south to north. Along the coast, the rainy season lasts from April to November, and the relatively dry season lasts from December to March; a transition period from March to April is marked by violent winds. The mean annual precipitation level of more than 100 inches (2,500 mm) occurs in about 150 days. In the central plateau region, precipitation decreases to about 60 inches (1,500 mm). There are four seasons; a light rainy season from May to June, a short dry season from July to October, a heavy rainy season from October to November, and a long dry season from December to May. The north, however, has a dry season only from October to May and an average annual precipitation level of about 30 inches (750 mm). The wettest part of the country lies in the western highlands. Debundscha Point on Mount Cameroon has a mean annual precipitation level of more than 400 inches (10,000 mm), an average rarely attained elsewhere in the world, most of which falls from May to October.

Cameroon has been described as an “ethnic crossroads” because of its more than 200 different ethnic groups. There are three main linguistic groups: the Bantu-speaking peoples of the south, the Sudanic-speaking peoples of the north, and those who speak the Semi-Bantu languages, situated mainly in the west.

Agriculture is an important economic factor, especially with regard to the Country’s most important cash crops; cocoa, coffee, banana, cotton, etc. Outside of the capital and plantation zones, most inhabitants are subsistence farmers. Manufacturing also contributes 17.3% of Cameroon’s gross domestic product (GDP) (2008). The main manufacturing activities are in petroleum production and refining, aluminium production, food processing, light consumer goods, textiles and ship repair. Douala is the largest manufacturing centre.

Cameroon is divided into ten regions, namely; Adamawa, Centre, East, Littoral, South, South west, North, Far north, North west, and West. The majority of Cameroon’s population live in the urban areas or along the roads and in the major towns. The population density thins out away from the major towns through to the villages.

3.3. Population of the Study

According to Polit and Hungler (1999), population consists of the whole group of people that the researcher is interested and the result of the research can be generalized. Creswell (2012)

notes that population is a group of individuals who have the same characteristics. A Population is the Aggregate or Totality of Objects, Individuals, having one or more Characteristics in Common that are of interest to the Researcher (Amin, 2002). The four regions selected are; centre, littoral, north west and south west. There are two English speaking regions in Cameroon. These regions are today facing a crisis with most of the students moving out to study in the other regions of the country. The centre and Littoral regions have the highest number of active English secondary schools in the country today, therefore these two regions have the highest number of teachers. The northwest and southwest were selected because they are the two English- speaking regions of the country.

The population of this study refers to all the members of a well-defined group with similar characteristics, made up of all the Geography teachers in English secondary schools in Cameroon, distributed according to age and gender as shown below:

Table 10: Showing the Distribution of Geography Teachers in Cameroon.

DIFFERENT REGION	<25 yrs			25-40 yrs			>40 yrs			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T
SOUTH WEST	45	50	95	53	65	118	51	68	119	149	183	332
NORTH WEST	50	65	115	60	85	145	60	90	150	170	240	410
LITTORAL	55	90	145	65	100	165	70	90	160	190	280	470
CENTER	80	105	185	60	105	165	80	70	150	220	280	500
WEST	40	35	75	48	50	98	52	55	107	140	140	280
EAST	32	27	59	28	35	63	40	48	88	100	110	210
SOUTH	35	34	69	30	46	76	40	50	90	105	130	235
ADAMAWA	28	28	56	27	40	67	35	47	82	90	115	205
NORTH	29	27	56	26	36	62	35	47	82	90	110	200
FAR NORTH	27	28	55	25	37	62	36	49	85	88	114	202
TOTAL	421	489	910	422	599	1021	499	614	1113	642	822	3044

Source: The Different Regional WhatsApp Groups (2020)

The researcher worked with Three Types of Population; the target population, accessible population and the sample populations.

3.3.1. The Target Population:

The target population is the specific, conceptually bounded group of potential participants to whom the researcher may have access that represents the nature of the population of interest. To be successful in defining the target population, one must examine all the boundary considerations in an iterative manner to ensure that the end description of the target population is inclusive enough to provide sufficient data to the study. The target population must also be exclusive enough to avoid having participants who do not represent the study's needs, which will misrepresent the population of interest. Much like the population of interest, the boundaries of the target population must be defined such that the researcher and other stakeholders understand the nature and extent of the group to be studied. Such considerations are important not only for ensuring the efficacy of the research, but also assist in budgeting resources for investigating the research problem.

A well-defined target population describes inclusion and/or exclusion criteria for who or for which entities may participate in the study. The target population must be a complete subset of the population of interest – members of the target population must also be described by the boundaries of the population of interest. Additionally, the target population is further restricted such that the researcher may clearly operationalize the boundaries for participation (Kalleberg et al., 1990). It is from the target population that the sampling frame is developed. To determine the target population, one must operationalize the unit's characteristics of interest based upon the study variables or the qualitative experience so the results of the study may be accurately inferred or transferred back to the population of interest (Ackerman et al., 2019).

Operationalizing the characteristics also benefits both the researcher and potential participants so they may recognize each participant's eligibility for the study. Very often the initial characteristics are relatively easy to apply, and this description gives the researcher insight into the target population and the population of interest, as a whole. The target population of this study comprises of geography teachers involve in teaching of form 3's in English Secondary Schools in Cameroon, distributed as shown below:

Table 11: Target population of the study

DIFFERENT REGION	<25 yrs			25-40 yrs			>40 yrs			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T
SOUTH WEST	35	45	80	33	25	58	17	33	50	85	103	188
NORTH WEST	40	55	95	45	75	120	45	75	120	130	205	335
LITTORAL	35	70	105	55	70	125	50	60	110	140	200	340
CENTRE	70	95	165	40	85	125	70	65	135	180	245	425
WEST	34	15	49	28	30	58	40	37	77	102	82	184
EAST	12	17	29	18	25	43	20	30	50	50	72	122
SOUTH	12	21	33	20	26	46	25	35	60	57	82	139
ADAMAWA	18	21	39	17	25	42	25	37	62	60	83	143
NORTH	15	17	32	16	18	34	25	27	52	56	62	118
FAR NORTH	17	17	34	17	27	44	16	29	45	50	73	123
TOTAL	288	373	661	289	406	695	333	428	761	910	1207	2117

Source: The Different Regional WhatsApp Groups (2020)

3.3.2. Accessible population

The Accessible Population comprises those Elements which are within the reach of the Research. In this study, the accessible population is the form 3 teachers of geography of the selected English secondary Schools in the four selected regions in Cameroon.

The accessible population of the Study comprised of geography teachers of form 3 from the four selected Regions of Cameroon, which are; the centre, littoral, southwest and northwest, as shown below

Table 12: Showing the accessible population of the study

DIFFERENT REGION	<25 yrs			25-40 yrs			>40 yrs			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T
SOUTH WEST	35	45	80	33	25	58	17	33	50	85	103	188
NORTH WEST	40	55	95	45	75	120	45	75	120	130	205	335
LITTORAL	35	70	105	55	70	125	50	60	110	140	200	340
CENTRE	70	95	165	40	85	125	70	65	135	180	245	425
TOTAL	180	265	445	173	255	428	182	233	415	535	753	1288

3.3.3. Sampling Procedure

Sampling is a process or technique of choosing a sub-group from a population to participate in the study. It is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected (Ogula, 2005). There are two major sampling procedures in research. These include probability and non-probability sampling.

The Probability sampling is where every unit in the population has an equal chance (greater than zero) of being selected. There are four basic types of sampling procedures associated with probability samples. These include simply random, systematic sampling, stratified and cluster. This study stratified the population before using the simple random sampling procedure. It is the most effective method of sampling when a researcher intends to get a representative sample of a population. It involves categorizing the members of the population into mutually exclusive and collectively exhaustive groups (Amin, 2005). An independent simple random sample is then drawn from each group. Stratified sampling techniques can provide more precise estimates if the population surveyed is more heterogeneous than the categorized groups. This technique can enable the researcher to determine desired levels of sampling precision for each group, and can provide administrative efficiency. The main advantage of the approach is its capacity to give the most representative sample of a population (Hunt and Tyrrel, 2001).

On the other hand, a non-probabilistic sampling technique is the method of choice when the population is not created equal and some participants are more desirable in advancing the

research project’s objectives. Non-probability sampling techniques are the best approach for qualitative research. Because the researcher seeks a strategically chosen sample, generalizability is more of a theoretical or conceptual issue, and it is not possible to generalize back to the population (Palys & Atchison, 2014). The qualitative study will use the purposive sampling technique for the selection of participants on the focus group discussion. The two sampling procedures were used in the study.

3.3.4. Sample

A sample refers to a smaller, manageable version of a larger group. It is a subset containing the characteristics of a larger population. Samples are used in possible members or observations. The sample is the set of units selected to represent the population of interest (Gravetter & Wallnau, 2017). The data provided about the sample will be analyzed and the results inferred (quantitative) or transferred (qualitative) to the population of interest. The sample should be representative of that population of interest, a requirement addressed by prescribing the correct sampling frame and by using an appropriate sampling method. When selecting a sample, there are two primary considerations: how many units must be in the sample (sample size) and how will these units be selected (sampling methods).

The Sample Population is the Smallest Group usually drawn from the Accessible Population, through a definite Procedure. The Sample represents the Group of People or Objects on which Data or Information was collected and analysed. It represents the population as a whole and does not reflect any bias toward a specific attribute. The sample was selected using the statistical table of Krejcie and Morgan (1970), as shown on appendix F. A total of 50 schools were selected from the different categories of government, private and confessional, as shown below:

Table 13: Showing selection of sample.

Region	Number of teachers			Sample	Number of schools
	Government	Private	confessional		
Centre	55	27	13	95	15
Littoral	57	32	8	97	15
Northwest	23	10	10	43	10
Southwest	23	11	9	43	10
Total	158	80	40	278	50

Source: Regional Geography Whatsapp groups

The accessible population was also randomised to give a representative sample as shown below:

Table 14: Sample Population for the study

DIFFERENT REGION	<25 yrs			25-40 yrs			>40 yrs			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T
SOUTH WEST	6	9	15	5	6	11	4	10	14	15	25	40
NORTH WEST	7	8	15	6	9	15	5	8	13	18	25	43
LITTORAL	10	20	30	20	15	35	13	17	30	45	50	95
CENTRE	25	35	60	10	8	18	12	10	22	45	55	100
TOTAL	48	72	120	41	38	79	34	45	79	123	155	278

Source: Regional Geography Whatsapp groups

3.4. Instrumentation

Instrumentation is the process of developing, testing and using a device or an instrument (Amin, 2005). Instrumentation refers to the tools or means by which investigators attempt to measure variables or items of interest in the data-collection process. It is not only instrument design, selection, construction, and assessment, but also to the conditions under which the designated instruments are administered. The instrument is the device used by investigators for collecting data.

This study is going to use the following instruments; questionnaires, observation guide and focus group discussion.

3.4.1. Questionnaire

The questionnaire was adopted from the Classroom Assessment Practices and Skills (CAPS) questionnaire and used as one of the data collection instrument. The questionnaire is divided into five main sections. The first section is divided into two subsections. The first subsection asks teachers to provide demographic information. The second subsection asked for, their educational background, teaching experience, the certificate they have, professional certificate and possibility for further research (8 items).

The second section verified the teaching experience. The purpose of this section of the questionnaire was to document, using closed-ended items, the role of experience in classroom assessment. Teachers were asked questions about the number of years of teaching, recycling activities they have attended, number of years of setting and marking of the national examination, students' involvement in planning assessment and the use of peer assessment (6 items). The third section asked question on the class size, (1 item). The fourth section asked teachers about their motivation towards their job. Teachers were asked about their status, type of incentives they receive, working conditions and job security and what pushed them to become teachers, (8 items).

A 4-point Likert Scale ranging from "Strongly Agree" to "Strongly Disagree" options meant to measure teachers' usage of assessment practices. The students were asked to indicate their number in class, teachers use of; objectives, frequent and different assessment methods, feedback and remediation, and their perception on classroom assessment, (15 items). A total 36 items was used in the research.

3.4.2. Observation Guide

The observation guide was used to observe participants in their natural environment. It enabled us to see what is happening at the beginning, middle and end of the lesson. We observed if; the teachers do review their previous lessons by asking review questions, clearly write out lesson objectives, their use of modern technology in teaching, students participate in class and their timely completion of class task

3.4.3. Focus Group Discussion (FGD)

Focus group discussions are use when you need to understand an issue at a deeper level than you can access with a survey. They are helpful for adding meaning and understanding to existing knowledge, or getting at the "why" and "how" of a topic. The focus group guide asked questions on teachers' work environment, their use of the staffroom, the types of threats they face, impact of the corona virus, and the school shift system.

3.5. Validity of Instrument

Validity explains how well the collected data covers the actual area of investigation (Ghauri and Gronhaug, 2005).

Validity basically means “measure what is intended to be measured” (Field, 2005). The main types of validity should be considered before using an instrument. These types are represented on the graph below.

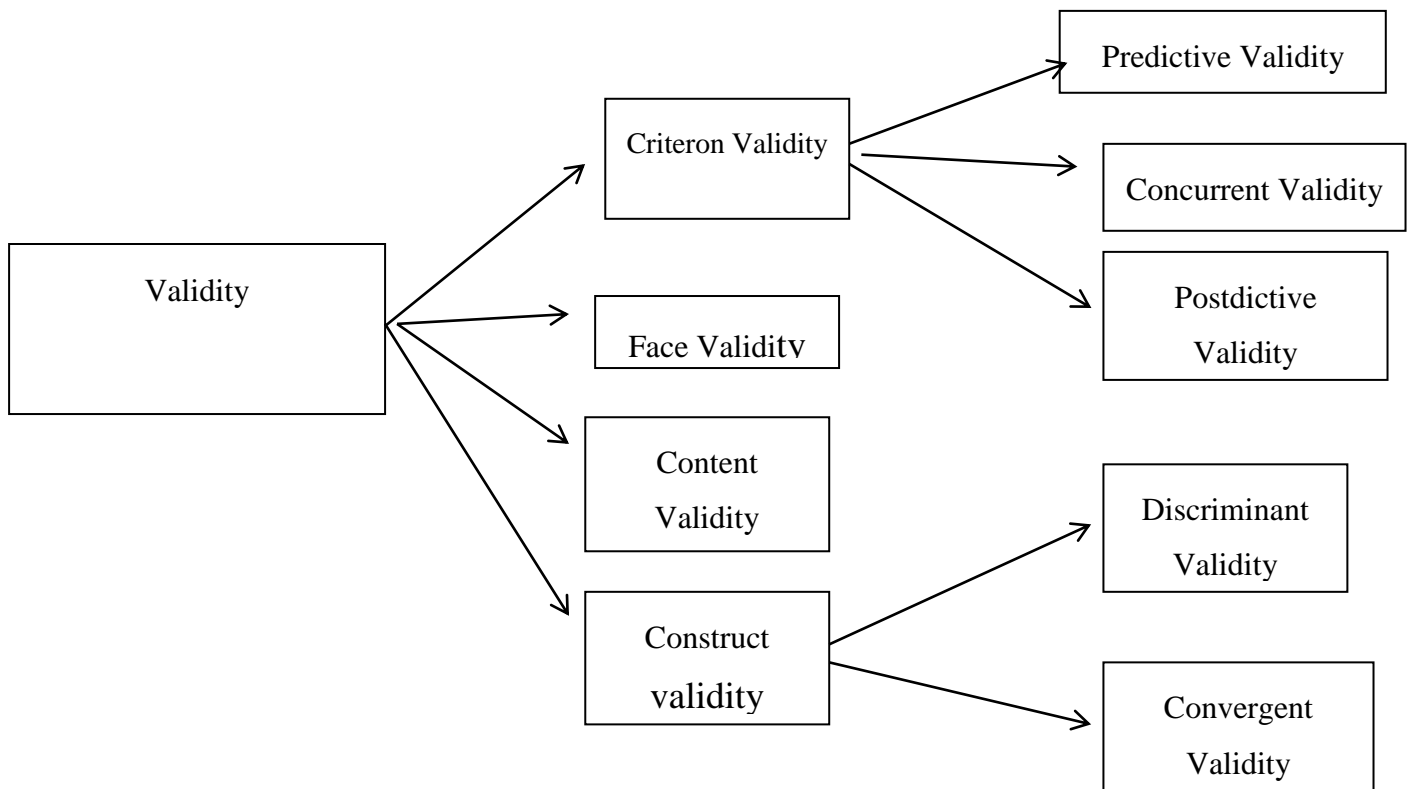


Figure 5: Types of various forms of validity test (adapted from Hamed Teherdoost)

Face validity: Is a subjective judgement on the operationalisation of a construct in the judgement of non-experts, such as, test takers and representatives of the legal systems. It evaluates the appearance of the questionnaire in terms of feasibility, readability, consistency of style and formatting, and the clarity of the language used. The face validity of the instrument used in this research was tested by pilot testing the instrument on the population and adjustments were done.

Content Validity: Content validity is defined as “the degree to which items in an instrument reflect the content universe to which the instrument will be generalised” (Straub, Boudreau et al, 2004). It refers to a process that aims to provide assurance that an instrument (checklist, questionnaire, or scale) measures the content area it is expected to measure (Frank-Stromberg & Olsen, 2004). It evaluates the skill or knowledge measured by a test item according to the degree to which that skill is essential to the job (Lawshe,1975). In general, content validity

involves evaluation of new survey instrument in order to ensure that it includes all the items that are essential and eliminates undesirable items to a particular construct domain (Lewis et al, 1995, Boudreau et al, 2001).

To ensure the content validity of the research instrument, a proper literature review was done. Teachers understanding about classroom assessment are central to the change process considered in educational research. Also, there were follow-ups with the evaluation by expert judges. The researcher was present with the experts in order to facilitate validation. Lawshe's method, initially proposed in a seminal paper in 1975 (Lawshe, 1975), and widely used to establish and quantify content validity in diverse fields including health care, education, organisational development, personnel psychology, and market research (Wilson, Pan, & Schumsky, 2012), was used.

It involves a panel of subject matter "experts" rating items into one of three categories: "essential," "useful, but not essential," or "not necessary." Items deemed "essential" by a critical number of panel members are then included within the final instrument, with items failing to achieve this critical level discarded. Lawshe (1975), suggested that based on "established psycho-physical principles," a level of 50% agreement gives some assurance of content validity. Each item was assessed using the three-point scale (not necessary, useful but not essential, and essential), with more than 75 % agreements for most items. A total of seven experts were involved.

3.6. Reliability of Instrument

Reliability concerns the extent to which a measurement of a phenomenon provides stable and consistent result (Carmines and Zeller, 1979). Reliability is also concerned with repeatability. For example, a scale or test is said to be reliable if repeated measurement made by it under constant conditions will give the same result (Moser and Kalton, 1989).

Testing for reliability reflects the consistency across the parts of a measuring instrument. A scale is said to have high internal consistency reliability if the items of the scale "hang together" and measure the same construct (Huck, 2007, Robinson, 2009). The most commonly used internal consistency measure is the Cronbach Alpha Coefficient. It is viewed as the most appropriate measure of reliability when making use of Likert Scales (Whitley, 2002, Robinson, 2009). No absolute rule exists for internal consistencies, however, most agree on a minimum internal consistency coefficient of 0.70 (Whitley, 2002, Robinson,

2009). Although reliability is important for study, it is not sufficient unless combined with validity. In other words, for a test to be reliable, it also needs to be valid (Wilson, 2010).

Table 15: Reliability Coefficient

S/N	Instrument Sub-Scale	No of items	Mean X	SD.	Reliability Estimates
1.	Teachers' qualification	6	18.76	3.18	0.723
2.	Teaching experience	6	25.20	3.69	0.758
3.	Teachers' motivation	8	19.33	2.67	0.864

3.7. Administration of the instrument

The researcher did all what is possible to respect the rights of the respondent. An attestation to show we are research students was collected from the university. This was presented at all the selected secondary schools. We were directed to meet the vice principal in charge of geography who gave us the contacts and timetable of teachers of forms 3.

We met the teachers individually and presented the inform consent form (see appendix A). Only teachers who gave in their personal consent were selected. In the troubled regions of the North West and South West, where teachers don't want to be identified as such, most of them had to answer the questionnaire online, (In such situations the researcher went to the different schools and got the students assess the teachers). Using their names, a simple random sampling was done to get the teachers of the streams. Once identified the questionnaire was given to the population selected. The questionnaire for students was equally given to the two randomly selected students taught by the teacher and attached to the teachers' questionnaire to ease analysis.

Teachers were been observed using an observation guide during the pre-field visits and were equally observed during the field visit. 10 teachers were pee-observed, and their responses help us shaped the observation guide. These teachers were not considered for the study.

A total of 30 non-participant observations were conducted within the population of the study, using the observation guide. Notes were also taken during and after the observation. Notes taken during the observation were a backup documentation in case the recording equipment failed while post observation notes (memos) were taking to document personal feelings and

reflections about the observation. Also, 2 students per teacher were equally selected to accompany the answers of each teacher. This information helped us to evaluate the teachers better.

Focus group discussions (FGD), were carried out in all the four selected regions of the study to verify the fifth objective, which is to investigate the influence of teachers' work environment on the implementation of classroom assessment practices and also other recent happening in the country such as the online learning platform and the shift system of schooling developed as a result of the corona virus pandemic. The FGD was divided into different themes.

Theme one: was teachers' notion about their work environment; Theme two: was on instructional time, shift system and the online learning platform with two sub-themes; sub-theme one: instructional time and the shift system and sub-theme two: the notion of online learning platforms. The teachers for the focus group discussions were selected through purposive sampling from the sampled population. The first teachers who gave their consent were selected in a first come first served basis from the different regional teachers' WhatsApp groups. In the Centre region we selected eight, Littoral region eight, Southwest region, eight and seven from the Northwest region, giving a total of 31 participants for the four-focus group. A WhatsApp group for the sampled population was created for each region on which a date and time for the focus group discussion, the assistant and the note taker were all chosen ahead of time from the different sample of each region and this was also done purposively. The facilitator or moderator in this case, was the researcher. It was agreed that the focus groups will take place on the zoom platform. The questions were asked following the themes and for each focus group we maintained the sequence of answering to ease computation.

3.8. Procedure for Data Analysis

A data coding schedule for the quantitative analysis in the form of a table was produced and presented following our different hypothesis as thus:

Hypothesis 1: There is no significant relationship between teachers' qualification and the implementation of classroom assessment practices

Independent variable: teachers' qualification

Dependent variable: implementation of classroom assessment practices

Table 16: Data coding sheet for the influence of teachers' qualification

	Opinion statement	Opinion			
		SA	A	D	SD
1.		4	3	2	1
2.		1	2	3	4
3.		1	2	3	4
4.		1	2	3	4
5.		1	2	3	4
6.		4	3	2	1

Hypothesis 2: There is no significant relationship between teachers' teaching experience and the implementation of classroom assessment practices

Independent variable: teachers' teaching experience

Dependent variable: implementation of classroom assessment practices

Table 17: Data coding sheet for teachers' teaching experience

	Opinion statement	Opinion			
		SA	A	D	SD
1		1	2	3	4
2		4	3	2	1
3		4	3	2	1
4		4	3	2	1
5		4	3	2	1
6		4	3	2	1

Hypothesis 3: There is no significant relationship between class size and the implementation of classroom assessment practices

Independent variable: class size

Dependent variable: implementation of classroom assessment practices

Table 18: Data coding sheet for impact of class size

	Opinion statement	Opinion			
		SA	A	D	SD
1.		4	3	2	1

2.		4	3	2	1
3.		4	3	2	1
4.		4	3	2	1
5.		4	3	2	1
6.		4	3	2	1

Hypothesis 4: There is no significant relationship between teachers' motivation and the implementation of classroom assessment practices

Independent variable: teachers' motivation

Dependent variable: implementation of classroom assessment practices

Table 19: Data coding sheet for impact of teachers' motivation

	Opinion statement	Opinion			
		SA	A	D	SD
1.		4	3	2	1
2.		4	3	2	1
3.		4	3	2	1
4.		4	3	2	1
5.		4	3	2	1
6.		1	2	3	4
7.		1	2	3	4
8.		1	2	3	4

Table 20: Coding Sheet for the dependent variable: Implementation of Classroom Assessment Practices

	Opinion statement	Opinion			
		SA	A	D	SD
1.		4	3	2	1
2.		4	3	2	1
3.		4	3	2	1
4.		4	3	2	1
5.		4	3	2	1
6.		4	3	2	1
7.		4	3	2	1
8.		4	3	2	1

9.		4	3	2	1
10		4	3	2	1
11		4	3	2	1
12		4	3	2	1
13		4	3	2	1
14		1	2	3	4
15		4	3	2	1

For each teacher we assigned two students and we ‘married’ the marks that the students evaluated their teachers. The questionnaire response for each two students per teacher were attached to the teachers’ own questionnaire and the grading of the teachers was used for the dependent variables which was students grading of the teachers.

The correlation between variables will be shown using the one-way Analysis of Variance (ANOVA), where the variables are both categorical and the Pearson’s Product Moment Correlation Analysis because the dependent and independent variables are all continuous data. The data was presented with the aid of a data presentation analyst.

The qualitative data was also analysed. Audio recordings were transcribed and field notes expanded after each focus group discussion and observation. Data transcription involves listening to the tape and simultaneously writing down or typing everything that is said on the tape (Mack et al. 2005). In this case, the tape recorder was put on loud speaker in a quiet place and was listened to and notes taken. Before engaging in the transcription process the researcher agreed on certain standard conventions; on a uniform way of identifying the researcher and the participants throughout the transcripts and on a uniform way of presenting preliminary information such as the venue, time and date. Field notes were also expanded by the researcher after each interview session. Expanding field notes involves transforming raw and scratch notes into a narrative and elaborating on initial observations (Mack et al. 2005). ‘Good note taking often triggers the memory, but with passage of time, this opportunity is lost’ (Mack et al.2005:44). Following this suggestion, all field notes were expanded after each observation session or very early in the morning the next day.

Data was then analysed after transcription and expansion of notes using inductive analysis. Inductive analysis refers to an approach that primarily uses detailed information from raw data to derive concepts, themes, and categories through interpretations made from the raw

data by a researcher (Thomas 2006). The inductive approach involves reducing the aggregate data, that is, creating meaning in complex data through the development of summary themes or categories from the raw data. Using inductive data analysis approach, analysis was done through open coding. Transcripts were read repeatedly to identify emerging themes and categories that were related to the research objectives. The researcher also took notes during the coding process. This was to document reflections and different patterns noticed during the coding process. ATLAS.ti v22.0 was used as qualitative software for the analysis. In this regard, thematic analysis was used with the density and groundedness of each code examined.

3.9. Extraneous Variables

An extraneous variable is any variable you're not interested in studying that could also have some effect on the dependent variable. They are undesirable variables that influence the relationship between the variables that the researcher is observing (Amin, 2002). There are three types of extraneous variables; situational, participant/subject variable and demand characteristics. The extraneous variables for this research is participant and include age and gender. In order to hold the extraneous variables constant and prevent the selection bias thereby ensure against the accidental bias, randomization was used. Age was divided into three category; <25 years, 25-40 years and >40 years, while the gender was categorize into Male and Female.

Random sampling, however, does not eliminate extraneous variable, it only ensures it is equal between all groups. If it is not used the effect that an extraneous variable can have on the study results become a lot more of concern.

Table 21: Synoptic Table of Research Tools and Instruments

Main Research questions	Specific research question	Main hypothesis	Specific hypothesis	Independent variable	Dependent variable	Modalities	Indicators	Statistical instruments	Analysis	Presentation
1. What relationship exists between teachers' characteristics and the implementation of classroom assessment practices in English secondary schools in Cameroon?	1. Does a relationship exist between teachers' characteristics and the implementation of classroom assessment practices in secondary schools in Cameroon?	1. There exist no significant relationship between teachers' characteristics and the implementation of classroom assessment practices	1. There exist a significant relationship between teachers' qualification and the implementation of classroom assessment practices.	Teacher qualification	Implementation of classroom assessment practices	-Strongly agree -Agree -Disagree -Strongly disagree	-teacher training -content knowledge -teacher licensure -certification	Questionnaire,	One-way analysis of variance	Frequency tables and graphs
2. What is			2. there exist a significant relationship	Teaching experience	Implementation of classroom	-Strongly agree -Agree -Disagree	-number of years of teaching -	Questionnaire,	One-way analysis of variance	Frequency tables and graphs

Main Research questions	Specific research question	Main hypothesis	Specific hypothesis	Independent variable	Dependent variable	Modalities	Indicators	Statistical instruments	Analysis	Presentation
the relationship between school environment and the implementation of classroom assessment practices in English secondary schools in Cameroon?			p between teaching experience and the implementation of classroom assessment practices		m assessment practices	-Strongly disagree	professional development programs -teachers use of time -setting and marking of national examination			
	2. Does a relationship exist between school environment and the implementation of classroom assessment practices in	3. There exists no significant relationship between class size and the implementation of classroom assessment	There exists a significant relationship between class size and the implementation of classroom assessment	Class size	implementation of classroom assessment practices	-Strongly agree -Agree -Disagree -Strongly disagree	-number of students per class	Questionnaire, observation	One-way analysis of variance	Tables and graphs

Main Research questions	Specific research question	Main hypothesis	Specific hypothesis	Independent variable	Dependent variable	Modalities	Indicators	Statistical instruments	Analysis	Presentation
	secondary schools in Cameroon?	practices?	practices.							
		There exists no significant relationship between teacher motivation and the implementation of classroom assessment practices?	There exists a significant relationship between teacher motivation and the implementation of classroom assessment practices.	Teacher motivation	implementation of classroom assessment practices .	-Strongly agree -Agree -Disagree -Strongly disagree	-staff recognition -teacher participation in school decision making -salaries	Questionnaire,	Pearson Product Moment Correlation	Tables and graphs

3.10. Ethical Considerations

Research involves investigating private lives and placing accounts in the public arena therefore ethics is an important issue a researcher should take into consideration when carrying out research. Ethical considerations in this research include informed consent, confidentiality and anonymity. Informed consent involves a procedure for ensuring that research participants understand what is being done to them, the limits to their participation and awareness of any potential risks they incur (Wiles et al. 2005). It also involves participants according to their willingness to participate in the research without undue inducement or any form of constraint or coercion. It was used for the questionnaire, non-participant observation and the focus group discussions.

For the questionnaire, the researcher pleaded with the respondent and only those who accepted were served with questionnaire. We equally let them know that the questionnaire was mainly for academic purpose as such the name of the respondent was not indicated. They were equally assured of the confidentiality of their responses and were reassured with the certificate of confidentiality obtained by the researcher. We ended up thanking them for their collaboration.

At the beginning of each observation or focus group discussion, the purpose of the research, what information is required from the participants is presented in the observation protocol and how data collected will be used was explained to the participants. They were clearly informed that participation was voluntary, and the participants were free to withdraw from the observation at any point in time without any explanations given to the researcher. Their permission to use a tape recorder, to record the observations and to take photos was demanded. All the participants approved the use of a tape recorder, but the issue of photos was problematic to most of the participants, therefore no photos were taken during the observations. Observations or focus group discussions began only when participants had fully approved their willingness to participate. With regards to confidentiality and anonymity, participants were made to understand that all information will be handled confidentially and used for research purposes only. To ensure this, all observation records have been kept in password protected computers and handwritten transcriptions were shredded after typing and storing them in the computer.

The major difficulty encountered in this study was the acquisition of literature. Most of the studies on teachers' characteristics look at their influence on the indirect variable, which is

students' performance. The direct effect of teachers' characteristics on teachers' effectiveness is less studied making empirical review of literature difficult. Most of the websites are right-protected and we had to pay for most of the literature. This cost us more than we expected.

This chapter presents a detailed way in which the research was conducted. The chapter sheds light on why both the quantitative and qualitative methods were deemed best for this research which among other reasons included the objective to uncover in detail, the implementation of assessment practices in secondary schools in Cameroon. It describes the methods used to collect data and explains how the data was analysed. Questionnaire was used as the main quantitative tool for data collection while non-participant observation and focus group discussions were the qualitative techniques used to collect data in order to answer the research questions. It also highlights the challenges of the method used and how they were managed. The ethical principles were equally mentioned.

CHAPTER FOUR

PRESENTATION OF RESULTS

The study aims at examining the extent to which teachers' characteristics and school environment influence the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon

Specifically, the study is aimed at the following:

1. To verify the influence of teachers' qualification on the implementation of classroom assessment practices
2. To investigate the impact of the teacher's teaching experience on the implementation of classroom assessment practices
3. To verify the influence of class size on the implementation of classroom assessment practices
4. To investigate the influence of teachers' motivation on the implementation of classroom assessment practices
5. To verify the influence of teachers' work environment on the implementation of classroom assessment practices

The results of the statistical analyses of data gathered for this study are presented in this chapter. The presentation of the data was done following the trends of the four hypotheses and one research question directing the study. The chapter is therefore presented under the following outlines:

General Description of Data/Variables

Hypothesis-by-Hypothesis presentation of Result

Summary of Results

4.1. General Description of Data/Variables

This study was designed to investigate the extent to which teachers' characteristics and school environment influence the implementation of classroom assessment practices amongst

English secondary school teachers in Cameroon. Descriptive data analyses for all variables in the study are presented in Table 22.

Table 22: Descriptive data for the variables of concern

Descriptive data for the variables of concern			
	Mean	Std. Dev	N
Teachers' Qualification	Categorical	Categorical	278
Teachers' Teaching Experience	Categorical	Categorical	278
Class Size	Categorical	Categorical	278
Teachers' Motivation	20.7986	3.96770	278
Implementation Of Classroom Assessment Practices	82.4029	6.99481	278

The scores obtained were analysed, presented and interpreted to accept or reject each of the four null hypotheses guiding this study.

4.2. Data Analysis and Interpretation

The data was analysed hypothesis by hypothesis depending on the kind of data collected for each variable in each hypothesis. The following hypotheses were analysed at 0.05 level of significance.

General Hypothesis

In order to answer the above research questions and to examine the extent to which teachers' characteristics and school environment influence the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon, four hypotheses are tested using the one-way Analysis of Variance (ANOVA) and the Pearson Product Moment Correlation Analysis. The hypotheses are:

- 1) H1: There exist a significant relationship between teachers' qualification and the implementation of classroom assessment practices;

Ho: There exist no significant relationship between teachers' qualification and the implementation of classroom assessment practices

- 2) H1: There exist a significant relationship between teachers' teaching experience and the implementation of classroom assessment practices;

Ho: There exist no significant relationship between teachers' teaching experience and the implementation of classroom assessment practices;

- 3) H1: There exist a significant relationship between class size and the implementation of classroom assessment practices;

Ho: There exist no significant relationship between class size and the implementation of classroom assessment practices;

- 4) H1: There is a significant relationship between teachers' motivation and the implementation of classroom assessment practices;

Ho: There is no significant relationship between teachers' motivation and the implementation of classroom assessment practices.

4.2.1. Hypothesis One

H1: There is a significant relationship between teachers' qualification and the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon;

Ho: There is no significant relationship between teachers' qualification and the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon

The independent variable in this hypothesis is teachers' qualification, while the dependent variable is the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon.

The respondents in the sample were categorized into three groups based on the teachers' qualification. These groups were categorized as follows:

LOW	Scores below 10
GOOD	Scores between 10 and 20
HIGH	Scores above 20

The dependent variable in the study and this hypothesis was the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon. The statistical analysis technique used to test this hypothesis was One-Way Analysis of Variance (One Way - ANOVA). The results of the data analyses are presented in Tables 23. The group means and standard deviations for the three groups on each of the three sub variables of the dependent variable and the actual results of ANOVA are presented in Table 23.

Table 23: Group means and standard deviations for the three groups on each of the three sub variables of the dependent variable and the actual analysis of ANOVA

Group means and standard deviations for the three groups on each of the three sub variables of the dependent variable and the actual analysis of ANOVA

Leadership Style	N	Mean	SD		
LOW	20	78.65	7.08		
GOOD	192	82.80	6.91		
HIGH	66	82.38	6.98		
Total	278	82.40	6.99		
Sources of Variation	Sum of squares	Df	Mean Square value	F	p-Value
Between Groups	312.318	2	156.159	3.243	0.041
Within Groups	13240.559	275	48.147		
Total	13552.878	277			

From the above results the calculated F-value for teachers’ qualification of 3.243 is higher than the critical F-ratio of 3.04 at 0.05 level of significance with 2 and 275 degrees of freedom. The null hypothesis was therefore rejected. This therefore means that there is a significant relationship between teachers’ qualification and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon.

Since there is a significant relationship between teachers' qualification and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon, a further pattern of the influence was explored using the Fisher's Least Significant Difference (LSD) multiple comparison analysis. The result of the analysis is presented in Table 24.

Table 24: Fisher's LSD Multiple Comparison analysis of the relationship between teachers' qualification and the implementation of classroom assessment practices amongst secondary school teachers in the Centre Region of Cameroon.

Teachers' Qualification	N = 20	N = 192	N = 66
Low	78.65^a	-4.15 ^b	-3.73
Good	-2.55 ^c	82.8	0.42
High	-2.11	0.42	82.38
	MSW=14.15		

Key

a= Group means are placed along the diagonal

b= Differences among group means are placed above the diagonal

c= Fisher's t-values are placed below the diagonal

*= Significant at 0.05 level (critical t=1.99)

The significant Fisher's t-value of 2.55 indicates that the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon. When the teachers' qualification is good (mean = 82.80) is significantly higher than the implementation of classroom assessment practices amongst secondary school teachers in Cameroon when the teachers' qualification is low (mean = 78.65). Also, the significant Fisher's t-value of 2.11 indicates that the implementation of classroom assessment practices amongst secondary school teachers in Cameroon when the teachers' qualification is high (mean = 82.38) is significantly higher than the implementation of classroom assessment practices amongst secondary school teachers in Cameroon when the teachers' qualification is low (mean = 78.65).

However, the non-significant Fisher’s t-value of 0.42 indicates that the implementation of classroom assessment practices amongst secondary school teachers in Cameroon when the teachers’ qualification is high (mean = 82.38) is not significantly different from the implementation of classroom assessment practices amongst secondary school teachers in Cameroon when the teachers’ qualification is good (mean = 82.80).

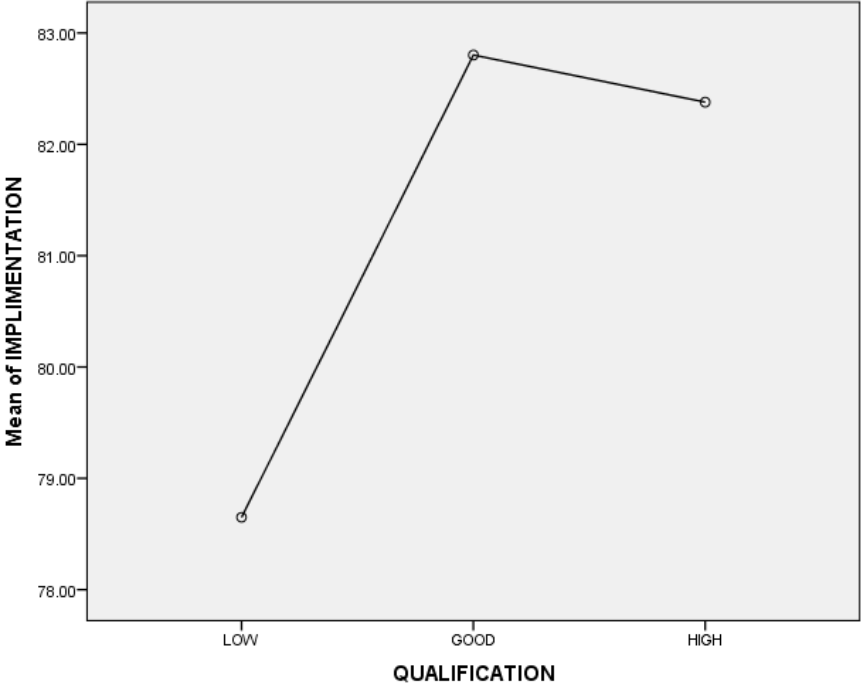


Figure 6: Fisher’s LSD Multiple Comparison analysis of the relationship between teachers’ qualification and the implementation of classroom assessment practices amongst secondary school teachers in the Centre Region of Cameroon

4.2.2. Hypothesis Two

H1: There exist a significant relationship between teachers’ teaching experience and the implementation of classroom assessment practices;

H0: There exist no significant relationship between teachers’ teaching experience and the implementation of classroom assessment practices;

The independent variable in this hypothesis is teachers’ teaching experience, while the dependent variable is the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon.

The respondents in the sample were categorized into three groups based on the teachers' teaching experience. These groups were categorized as follows:

Low	Scores below 9
Average	Scores between 10 and 18
High	Scores 19 and above

The dependent variable in the study and this hypothesis was the implementation of classroom assessment practices amongst secondary school teachers in Cameroon. The statistical analysis technique used to test this hypothesis was One-Way Analysis of Variance (One Way - ANOVA). The results of the data analyses are presented in Tables 21. The group means and standard deviations for the three groups on each of the three sub variables of the dependent variable and the actual results of ANOVA are presented in Table 25.

Table 25: Group means and standard deviations for the three groups on each of the three sub variables of the dependent variable and the actual analysis of ANOVA

Teaching Experience	N	Mean	SD		
LOW	18	83.5000	9.07647		
GOOD	250	82.4120	6.82617		
HIGH	10	80.2000	7.29992		
Total	278	82.4029	6.99481		
Sources of Variation	Sum of squares	df	Mean Square value	F	p-Value
Between Groups	70.214	2	35.107	.716	.490
Within Groups	13482.664	275	49.028		
Total	13552.878	277			

From the above results the calculated F-value for teachers' teaching experience of 30.716 is lower than the critical F-ratio of 3.04 at 0.05 level of significance with 2 and 275 degrees of freedom. The null hypothesis was therefore retained. This therefore means that there is no

significant relationship between teachers’ teaching experience and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon.

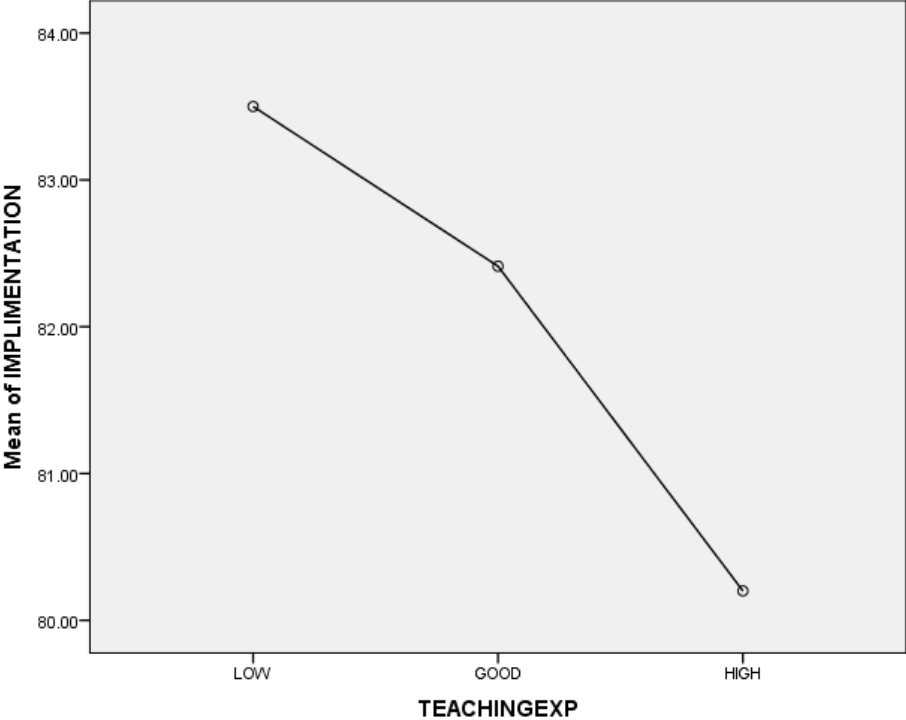


Figure 7: F-value for teaching experience

4.2.3. Hypothesis Three

H1: There is a significant relationship between class size and the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon;

Ho: There is no significant relationship between class size and the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon

The independent variable in this hypothesis is class size, while the dependent variable is the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon.

The respondents in the sample were categorized into three groups based on the class size. These groups were categorized as follows:

Small Class Size	Below 35 students
Normal Class Size	Between 35 and 50 students
Large Class Size	Above 50 students

The dependent variable in the study and this hypothesis was the implementation of classroom assessment practices amongst secondary school teachers in Cameroon. The statistical analysis technique used to test this hypothesis was One-Way Analysis of Variance (One Way - ANOVA). The results of the data analyses are presented in Tables 26. The group means and standard deviations for the three groups on each of the three sub variables of the dependent variable and the actual results of ANOVA are presented in Table 26.

Table 26: Group means and standard deviations for the three groups on each of the three sub variables of the dependent variable and the actual analysis of ANOVA

Class Size	N	Mean	SD		
Small	5	82.80	8.14		
Normal	111	83.21	6.68		
Large	162	81.84	7.16		
Total	278	82.40	6.99		
Sources of Variation	Sum of squares	df	Mean Square value	F	p-Value
Between Groups	124.02	2	62.01	1.27	.283
Within Groups	13428.86	275	48.83		
Total	13552.88	277			

From the above results the calculated F-value for class size of 1.27 is lower than the critical F-ratio of 3.04 at 0.05 level of significance with 2 and 275 degrees of freedom. The null hypothesis was therefore retained. This therefore means that there is no significant relationship between class size and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon.

4.2.4. Hypothesis Four

There is a significant relationship between teachers' motivation and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon;

There is no significant relationship between teachers’ motivation and the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon.

The independent variable in this hypothesis is teachers’ motivation, while the dependent variable is the implementation of classroom assessment practices amongst secondary school teachers in Cameroon. The scores of the independent variable were gotten from the responses recorded from the eight (8) items of a four- point Likert-scale questionnaire that measured the teachers’ motivation. The scores of the dependent variable were got from the fifteen (15) items of a four-point Likert scale questionnaire that measured the implementation of classroom assessment practices. The statistical analysis technique used to test this hypothesis was the Pearson Product Moment Correlation analysis.

The formula using deviation from the mean method is;

$$\Gamma_{xy} = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}}$$

Where x is the independent variable, y is the dependent variable and Γ_{xy} is the correlation coefficient for x and y

The result of the analysis is presented in Table 27.

Table 27: Pearson Product Moment Correlation analysis of the relationship between teachers’ motivation and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon (N= (278)

Variable	$\sum X$	$\sum X^2$			
	$\sum Y$	$\sum Y^2$	$\sum XY$	Γ_{xy}	p-value
Teachers’ Motivation (X)	5740	124618	475838	0.24	
Implementation Of Classroom Assessment Practices (Y)	22742	1901238			0.000

$p^* < 0.05$; $df=276$; critical $\Gamma_{xy} = 0.113$

The result of the analysis reveals that the calculated Γ_{xy} -value of 0.24 is higher than the critical Γ_{xy} -value of 0.113 at 0.05 level of significance with 276 degrees of freedom. Also, the p-value of 0.000 is lower than 0.05. With the result of this analysis, the null hypothesis was rejected and the alternative hypothesis retained. This result therefore means that there is a

significant relationship between teachers' motivation and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon.

Since there is a significant relationship between teachers' motivation and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon, a further exploration of the relationship showed that the $\Gamma_{xy} = 0.24$ was positive. This indicates that the better the teachers' motivation the better the implementation of classroom assessment practices amongst secondary school teachers in Cameroon.

4.2.5. Research Question Five: What relationship exists between teachers' work environment and the implementation of classroom assessment practices.

Data was collected through focused group discussion for teachers in the Centre, Littoral, North West and South West regions of Cameroon. ATLAS.ti v22.0 was used as qualitative software for the analysis. In this regard, thematic analysis was used with the density and groundedness of each code examined. Word density was presented to showcase a general picture of the core words used in the study via a cloud view. The code groups used were work environment in the Littoral region and Centre region. The major code themes were good work environment and uncomfortable work environment for the various regions. Coding was done via In Vivo coding, open coding, list coding, and quick coding and all the quotes were linked to their illustrated quotations.

Theme two CE OLP Respondent 1:

The online teaching platform has actually come to replace the number of lost hours though most students can not afford the telephones needed. Parents are either not available or not willing to give phones to their children. I sometimes get the notes and hand to where they do photocopy and students are expected to go there, pay and collect, which is not an easy task for students.

3 Codes:

- **Lack money to photocopy notes from OLP**

4 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:7 Theme two NR OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM

- **Make up for lost class periods**

6 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:4 Theme two NR OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two NR OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:8 Theme two NR OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:11 Theme two CE OLP Respondent 3: The online learning platform is very g..... (3504:3784) - D 3: ONLINE LEARNING PLATFORM

- **Students do not have phones**

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D 3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM / 3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106) - D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:8 Theme two LT LP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12 Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM / 3:14 Theme two CE OLP Respondent 6: The online learning platform has reall..... (4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two CE OLP Respondent 2:

Talking about the online learning platform to students, a student said "Madam, do you really think my parents will give me a phone because of this ". It is a really difficult situation even when teachers get the notes to pay for students to pay for photocopy is also against school rules "Don't ask students for any money what is therefore the way forward?"

2 Codes:

- **Lack money to photocopy notes from OLP**

4 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion
of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:9
Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109)
- D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking
about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM

- **Students do not have phones**

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online
learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM /
3:3 Theme two NR OLP Respondent 3: Revision lessons on TV is given after..... (819:1106)
- D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The
initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING
PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the
st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP
Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE
LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform
is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two
CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3:
ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about
the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12
Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) -
D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am
personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM /
3:14 Theme two CE OLP Respondent 6: The online learning platform has reall.....
(4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP

Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

3:11 Theme two CE OLP Respondent 3: The online learning platform is very g..... (3504:3784) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two CE OLP Respondent 3:

The online learning platform is very good because it has come to help finish the last topics of our syllabus which are difficult to get there, especially with the reduction of the teaching hours. Online learning in secondary school has come to stay.

1 Codes:

- **Make up for lost class periods**

6 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:11 Theme two CE OLP Respondent 3: The online learning platform is very g..... (3504:3784) - D 3: ONLINE LEARNING PLATFORM

3:12 Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two CE OLP Respondent 4:

Online teaching platform is good for both the students and the teachers. It helps reduce the workload for the teachers and pushes the work ahead. However, the students that this is meant for can't afford the technology to exploit it.

2 Codes:

- **Helps in meeting up with reduced time**

2 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:12 Theme two CE OLP Respondent 4: Online
teachings platform is good for..... (3788:4052) - D 3: ONLINE LEARNING PLATFORM

- **Students do not have phones**

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online
learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM /
3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106)
- D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two NR OLP Respondent 4: The
initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING
PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the
st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP
Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE
LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform
is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two
CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3:
ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about
the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12
Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) -
D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am
personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM /
3:14 Theme two CE OLP Respondent 6: The online learning platform has reall.....
(4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP

Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM.

3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two CE OLP Respondent 5:

I am personally grateful for the idea of on-line learning platform. However, the students should be provided with the necessary technology to meet up with the exigencies of the time. It is however difficult to control what students use their phones to do. Those that have the phones are turning to watch pornography films and scamming. Therefore, the students should be given the necessary Coaching to use mobile phones for school work only.

3 Codes:

- **Ca not control what students do with phones**

2 Quotations:

3:6 Theme two NR OLP Respondent 6: Telephones are banned in school yet we..... (1721:2014) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM

- **Phones encourage pornography**

2 Quotations:

3:6 Theme two NR OLP Respondent 6: Telephones are banned in school yet we..... (1721:2014) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM

- **Students do not have phones**

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D 3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM / 3:3 Theme two LT OLP Respondent 3: Revision lessons on television (TV) is given after..... (819:1106) - D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12 Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM / 3:14 Theme two CE OLP Respondent 6: The online learning platform has reall..... (4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

3:14 Theme two CE OLP Respondent 6: The online learning platform has reall..... (4536:4837) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two CE OLP Respondent 6:

The online learning platform has really helped some of us teachers to be interested in computers. The students are smart and they know how to go about it easily. Most of them complain of the absence of their parents to enable them to use their phones and get the lessons.

2 Codes:

- **Help teachers learn how to use technologies for education**

1 Quotations:

3:14 Theme two CE OLP Respondent 6: The online learning platform has reall.....
(4536:4837) - D 3: ONLINE LEARNING PLATFORM

- **Students do not have phones**

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online
learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM /
3:3 Theme two NR OLP Respondent 3: Revision lessons on TV is given after..... (819:1106)
- D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The
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PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the
st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP
Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE
LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform
is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two
CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3:
ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about
the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12
Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) -
D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am
personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM /
3:14 Theme two CE OLP Respondent 6: The online learning platform has reall.....
(4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP
Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE
LEARNING PLATFORM

**3:15 Theme two CE OLP Respondent 7: I think the online learning platform i.....
(4841:5167) - D 3: ONLINE LEARNING PLATFORM**

Text quotation

Theme two CE OLP Respondent 7:

I think the online learning platform is very good but not to replace the onsite teaching, meaning that the different topics taught on the platform shouldn't disturb it from teaching in classroom, that is it could serve better if it acts as purely a revision guide for students to read and follow up.

2 Codes:

- **Hybrid system is encouraged**

1 Quotations:

3:15 Theme two CE OLP Respondent 7: I think the online learning platform i..... (4841:5167) - D 3: ONLINE LEARNING PLATFORM

- **OLP can only compliment live teacher**

1 Quotations:

3:15 Theme two CE OLP Respondent 7: I think the online learning platform i..... (4841:5167) - D 3: ONLINE LEARNING PLATFORM

3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two CE OLP Respondent 8:

It is really a good initiative because it permits our students to practice the computer science they do in school. It is however difficult for parents because they can't afford the phones and the airtime for the children. Some think telephone was banned in schools and students shouldn't be allowed to use them even at home.

2 Codes:

- **Exposes students to use technologies in education**

2 Quotations:

3:2 Theme two LT OLP Respondent 2: Online learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

- **Students do not have phones**

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
 3: ONLINE LEARNING PLATFORM / 3:2 Theme two OLP Respondent 2: Online learning platform has come to s..... (524:815) - D
 3: ONLINE LEARNING PLATFORM / 3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106) - D
 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D
 3: ONLINE LEARNING PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D
 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D
 3: ONLINE LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D
 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D
 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D
 3: ONLINE LEARNING PLATFORM / 3:12 Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) - D
 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D
 3: ONLINE LEARNING PLATFORM / 3:14 Theme two CE OLP Respondent 6: The online learning platform has reall..... (4536:4837) - D
 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D
 3: ONLINE LEARNING PLATFORM

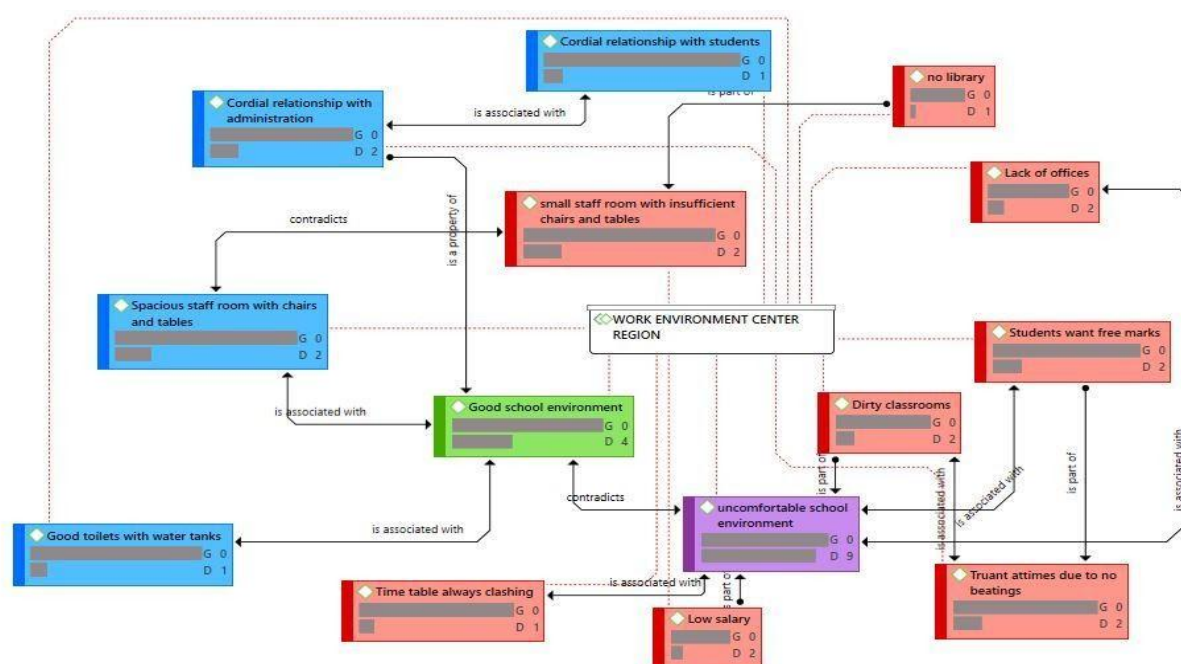


Figure 9: Qualitative indices of good and bad work environment in the Centre region

The major code group in this analysis (work environment in the center region) is anchored on two major code themes (good school environment and uncomfortable school environment). The teachers in the center region expressed a dual mindset as concerns their working environment. The schema showcases the fact that 33% of the codes indicated that teachers have a good work environment with very low groundedness and density (G=0, D=4). The teachers insinuated that the school environment is good because of the following reasons associated to the first code theme (G=0, D=4); availability of good toilets and water tanks (G=0, D=1), spacious staffroom with chairs (G=0, D=2), cordial relationship with administration (G=0, D=2), cordial relationship with students (G=0, D=2). All the codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-good school environment.

Also, on the other hand 67% of the codes were associated to the fact that the work environment in schools in the center region leaves much to be desired evidenced through the high density of the second code theme (G=0, D=9). The teachers opined that amongst the reasons why the school environment is uncomfortable includes but not limited to; The clashing of time tables (G=0, D=1), low salary (G=0, D=2), Students being truants (G=0, D=2) which is associated to the quest for free marks (G=0, D=2), dirty classrooms (G=0, D=2), lack of offices (G=0, D=2), absence of school library (G=0, D=1), and the fact that the staffroom is small with insufficient chairs and tables (G=0, D=3). The codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-uncomfortable school environment.

Qualitative indices of good and bad work environment in the Littoral region

3 ONLINE LEARNING PLATFORM

16 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim.....

(32:520) - D 3: ONLINE LEARNING PLATFORM

Text quotation

The online learning is a very good means of meeting up the reduced time for usual classes. It has come to make up for the periods that were lost. Unfortunately, most of the students don't have telephones and parents are not always around for the students to use their phones and get

notes. However, I get the notes from the online learning platform and give to my students to photocopy. This too poses another problem because they always complain of not having money to do the photocopy.

4 Codes:

- **Help in meeting up with reduced time**

2 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:12 Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) - D 3: ONLINE LEARNING PLATFORM

- **Lack money to photocopy notes from OLP**

4 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM

- **Make up for lost class periods**

6 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) -

D 3: ONLINE LEARNING PLATFORM /

- **Students do not have phones**

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D 3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM / 3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106) - D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12 Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM / 3:14 Theme two CE OLP Respondent 6: The online learning platform has reall..... (4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

3:2 Theme two LT OLP Respondent 2: Online learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two LT OLP Respondent 2:

Online learning platform has come to stay, it is a very good notion to expose students to the use of computer technology in education, however, most of the students don't have android telephones so it makes it very difficult for the students to follow lessons.

2 Codes:

- **Exposes students to use technologies in education**

2 Quotations:

3:2 Theme two LT OLP Respondent 2: Online learning platform has come to s..... (524:815)
- D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

• Students do not have phones

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D 3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM / 3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106) - D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12 Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM / 3:14 Theme two CE OLP Respondent 6: The online learning platform has reall..... (4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two LT OLP Respondent 3:

Revision lessons on television are given after the online learning. The revision on television is good though electricity problem is the order of the day in this region. Most parents can't afford android phones for their children to use and get the catch-up notes.

2 Codes:

- **Electricity outage is a problem in OLP**

1 Quotations:

3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106)

- D 3: ONLINE LEARNING PLATFORM

- **Students do not have phones**

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D

3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online

learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM /

3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106)

- D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The

initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING

PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the

st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP

Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE

LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform

is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two

CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3:

ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about

the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12

Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) -

D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am

personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM /

3:14 Theme two CE OLP Respondent 6: The online learning platform has reall.....

(4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP

Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

3:4 Theme two LT OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two LT OLP Respondent 4:

The initiative is a very good one, unfortunately parent can't afford the gadgets and airtime. We are talk of a majority of parents, who only see the reason why but don't have the money. It could be used to make up for the topics that could not be covered in the regular class system if the students have the phones.

2 Codes:

- **Make up for lost class periods**

6 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:8 Theme two NR OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:11 Theme two CE OLP Respondent 3: The online learning platform is very g..... (3504:3784) - D 3: ONLINE LEARNING PLATFORM

- **Students do not have phones**

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D 3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM / 3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106)

- D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two NR OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) -

D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12 Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM / 3:14 Theme two CE OLP Respondent 6: The online learning platform has reall..... (4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two LT OLP Respondent 5:

The online platform is good but the students still need follow up to succeed. The idea is what is good, did the authority think of telephones for students; I really feel like we are chasing the wind instead of looking at the real problem.

2 Codes:

- **Students do not have phones**

13 Quotations

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D 3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM /

3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106)
 - D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two NR OLP Respondent 4: The initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12 Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM / 3:14 Theme two CE OLP Respondent 6: The online learning platform has reall..... (4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

● **Students require strict follow up**

2 Quotations:

3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM

3:6 Theme two LT OLP Respondent 6: Telephones are banned in school yet we..... (1721:2014) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two LT OLP Respondent 6:

Telephones are banned in schools yet we encourage students to use them for studies. You cannot control what students do with telephones. An android phone to a student at a certain age should not be encouraged. It has provoked the advent of pornography in schools.

2 Codes:

- **Cannot control what students do with phones**

2 Quotations:

3:6 Theme two LT OLP Respondent 6: Telephones are banned in school yet we..... (1721:2014) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM

- **Phones encourages pornography**

2 Quotations:

3:6 Theme two LT OLP Respondent 6: Telephones are banned in school yet we..... (1721:2014) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM

3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two LT OLP Respondent 7:

The notion of online learning platform is good to meet up with the workload of teachers. We are doing our best to encourage students to go to the platform and get notes for the topics taught there. It is however difficult because most of them don't have the necessary telephone to get that. We make efforts to get the notes and photocopy for them though even the money for photocopy is still a problem.

4 Codes:

- **Lack money to photocopy notes from OLP**

4 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion
of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM / 3:9
Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109)
- D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking
about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM

• Make up for lost class periods

6 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM /
3:4 Theme two LT OLP Respondent 4: The initiative is a very good one unfo.....
(1110:1440) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP
Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE
LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform
is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two
CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3:
ONLINE LEARNING PLATFORM / 3:11 Theme two CE OLP Respondent 3: The online
learning platform is very g..... (3504:3784) - D 3: ONLINE LEARNING PLATFORM

• Students do not have phones

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online
learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM /
3:3 Theme two LT OLP Respondent 3: Revision lessons on TV is given after..... (819:1106)
- D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The
initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING
PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the
st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP
Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE

LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE LEARNING PLATFORM / 3:10 Theme two CE OLP Respondent 2: Talking about the online learning plat..... (3113:3501) - D 3: ONLINE LEARNING PLATFORM / 3:12 Theme two CE OLP Respondent 4: Online teachings platform is good for..... (3788:4052) - D 3: ONLINE LEARNING PLATFORM / 3:13 Theme two CE OLP Respondent 5: I am personally grateful for the idea..... (4056:4532) - D 3: ONLINE LEARNING PLATFORM / 3:14 Theme two CE OLP Respondent 6: The online learning platform has reall..... (4536:4837) - D 3: ONLINE LEARNING PLATFORM / 3:16 Theme two CE OLP Respondent 8: It is a really good initiative because..... (5170:5517) - D 3: ONLINE LEARNING PLATFORM

- **Students require strict followup**

2 Quotations:

3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING PLATFORM

3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM

Text quotation

Theme two LT OLP Respondent 8:

Online learning platform is good but our students don't have the necessary technology for that. It becomes difficult for teachers because we can't go back and teach those other topics due to the reduced time factor

2 Codes:

- **Make up for lost class periods**

6 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The initiative
is a very good one unfo..... (1110:1440)

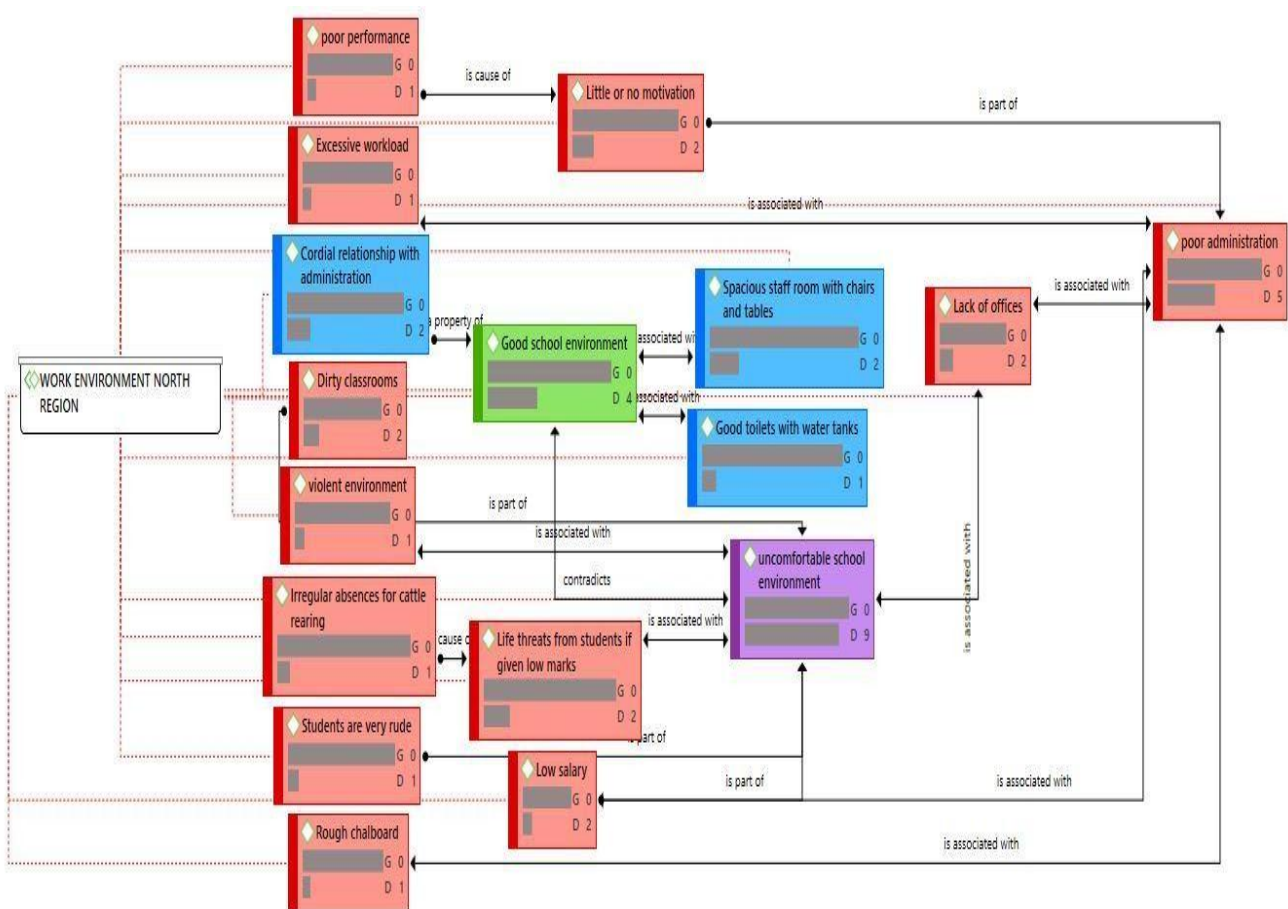
D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The
notion of online learning platform..... (2018:2451) - D 3: ONLINE LEARNING
PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but
o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM / 3:9 Theme two CE OLP
Respondent 1: The online teaching platform has actua..... (2706:3109) - D 3: ONLINE
LEARNING PLATFORM

- **Students do not have phones**

13 Quotations:

3:1 The online learning is a very good means of meeting up the reduced tim..... (32:520) - D
3: ONLINE LEARNING PLATFORM / 3:2 Theme two LT OLP Respondent 2: Online
learning platform has come to s..... (524:815) - D 3: ONLINE LEARNING PLATFORM /
3:3 Theme two NR OLP Respondent 3: Revision lessons on TV is given after..... (819:1106)
- D 3: ONLINE LEARNING PLATFORM / 3:4 Theme two LT OLP Respondent 4: The
initiative is a very good one unfo..... (1110:1440) - D 3: ONLINE LEARNING

PLATFORM / 3:5 Theme two LT OLP Respondent 5: The online platform is good but the st..... (1443:1717) - D 3: ONLINE LEARNING PLATFORM / 3:7 Theme two LT OLP Respondent 7: The notion of online learning platform..... (2018:2451) - D 3: ONLINE



LEARNING PLATFORM / 3:8 Theme two LT OLP Respondent 8: Online learning platform is good but o..... (2455:2701) - D 3: ONLINE LEARNING PLATFORM /

Figure 10: Qualitative indices of good and bad work environment in the Littoral Region.

Work environment in the Littoral Region is the major code group in this analysis which is anchored on two key code themes (good school environment and uncomfortable school environment). Teachers in the Littoral Region expressed a dual mindset as concerns their work environment. The schema indicates that 20% of the codes indicates that teachers have a good work environment with a low groundedness and density (G=0, D=4). The teachers insinuated that the school environment is good because of the following reasons associated to the first code theme (G=0, D=4); availability of good toilets and water tanks (G=0, D=1), spacious staffroom with chairs (G=0, D=2) and cordial relationship with administration (G=0,

D=2). All the codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-good school environment.

Moreover, 80% of the codes were associated with the fact that the work environment in schools in the Littoral region is uncomfortable, demonstrated by the high density of the second code theme (G=0, D=9). The teachers opined that amongst the reasons why the school environment is uncomfortable includes but not limited to; poor performance (G=0, D=1) which little or no motivation could be a causative factor (G=0, D=2) and is highly linked to poor administration (G=0, D=5) which is considered a cause of lack of offices in school (G=0, D=2), low salary (G=0, D=2), Irregular absences by teachers (G=0, D=1) which is associated with life threats from students if given low marks in examination (G=0, D=2), dirty classrooms (G=0, D=2), rough chalkboard (G=0, D=1), violent environment (G=0, D=1), rude students (G=0, D=1), excessive workload (G=0, D=1). The codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-uncomfortable school environment. The recursive paths had direct links with the causative codes.

Qualitative indices of good and bad work environment in the North West region

1 FGD -TEACHERS FROM THE NORTH WEST REGION

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581)

- D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

My work environment is a very difficult one. Presently we are being hunted by the separatist fighters because we go and teach and staying away the divisional officer is threatening us for salary suspension, that our names will be given that we pay the separatist fighters to continue advocating for no school. It is really difficult for us to go to work because of the crisis. It is good for every worker (especially teachers) to witness what we are going through to understand the situation.

3 Codes:

- **Difficult working environment**

1 Quotations:

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D
1: FGD -TEACHERS FROM THE NORTH WEST REGION

● **Life threats from separatist fighters**

8 Quotations:

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D
1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:6 My school environment is good. We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

● **Threats from Divisional Office (D.O) to curtail salary**

3 Quotations:

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D
1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

Faced with 2 crises keeps us preparing for the future. The ambazonian crisis and the COVID 19 crisis have left our work environment very unsafe. It is very difficult for us to talk about going to work. Sometimes you have to put your working materials in a market bag and dress like you are going to the farm just to disguise and get to your study post.

3 Codes:

- **COVID 19 protocols**

4 Quotations:

1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduce soo much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Difficult work environment**

4 Quotations:

1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Life threats from separatist fighters**

8 Quotations:

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to

the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:6 My school environment is good. We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

Just the identification document we carry exposes us to the separatist fighters. As a teacher in this region, your life is all at risk. In your house, workplace or everywhere you go, life is unbearable. My school has been burnt down our classes take place in the council premises. We have military men guarding there but once you are out of the campus, it's not easy. Honestly life is unbearable with the number of killings and kidnappings. Now we need is peace for life to move back to normal.

4 Codes:

- **Difficult work environment**

4 Quotations:

1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Life threats from separatist fighters**

8 Quotations:

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D
1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:2 Faced with 2 crises keeps
us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM
THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to
the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST
REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on.....
(1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The
senior division officer moves about with all the military man prot..... (1833:2403) - D 1:
FGD -TEACHERS FROM THE NORTH WEST REGION / 1:6 My school environment is
good. We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS
FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration
puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH
WEST REGION / 1:10 Instructional time assessment and time to prepare notes have
greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **No classrooms**

1 Quotations:

1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D
1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Random kidnaping of teachers**

3 Quotations:

1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D
1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer
moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS
FROM THE NORTH WEST REGION / 1:6 My school environment is good.We have a good
physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH
WEST REGION

**1:4 My work environment is vary unsafe. We run from guns and cutlasses on.....
(1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION**

Text quotation

My work environment is vary unsafe. We run from guns and cutlasses on an almost daily basis. I really love to live in a peaceful environment. We are living in total fear and honestly it is difficult to meet up with our duty. My administration is good though it is difficult for them to meetup with the run-away teachers,therefore they insist on us to come to work even with the insecurity we all know

3 Codes:

- **Difficult work environment**

4 Quotations

1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Life threats from separatist fighters**

8 Quotations:

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:6 My school environment is good. We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH

WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Threats from DO to curtail salary**

3 Quotations

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D

1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS

FROM THE NORTH WEST REGION / 1:5 The senior divisional officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:5 The senior divisional officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

The senior division officer moves about with all the military man protecting him yet he expects us to go to school without security. Honestly, it's good for us all to witness the kidnappings and amputations done on teachers to talk of a safe work environment. Life is almost unbearable in this region. Leaving Bamenda to my station I always dress as a mad man and prefer to move without an identity card to go safe. I work three days a week then move to Bamenda Town. The students too are not safe because they have been chased out of school by the same separatist fighters.

4 Codes:

- **Difficult work environment**

4 Quotations

1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D

1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS

FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH

WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Life threats from separatist fighters**

8 Quotations

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:6 My school environment is good. We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **random kidnaping of teachers**

3 Quotations

1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) – D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:6 My school environment is good. We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Threats from DO to curtail salary**

3 Quotations

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:6 My school environment is good. We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

My school environment is good. We have a good physical milieu, good administration with didactique materials arriving on time. The school has a good platform with few heads of departments having offices. Life is difficult here since 2016 with the anglophone crisis that has left teachers at the center of attacks (kidnappings, amputations) for ransom. The fighters (ambazonians) say teachers started the fight so they must continue, this has really made life difficult for us. The covid pandemic has also made life difficult with the putting on of masks all day to teach. We are gradually adjusting to the new dispositions put in place.

4 Codes:

- **Good administration**

1 Quotations

1:6 My school environment is good. We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Good environment**

2 Quotations

1:6 My school environment is good. We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609)

- D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Life threats from separatist fighters**

8 Quotations

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:6 My school environment is good. We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

• Random kidnaping of teachers

3 Quotations

1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:6 My school environment is good, we have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

My work environment is good. Administration puts didactique materials at our disposal on time and our students are very respectful and conscious of work. We have a very good relationship with the school administration. We give our questions on time and examinations goes on well. Life has however been very difficult with the anglophone crisis. That has made

teachers to be hunted by the separatist fighters. The covid 19 also saw the lockdown of school which left us in the private sector once again with no salaries. Life has not been the same since the end of 2016.

3 Codes

- **COVID 19 protocols**

4 Quotations

1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced soo much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Good environment**

2 Quotations

1:6 My school environment is good.We have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Life threats from separatist fighters**

8 Quotations

1:1 My work environment is a very difficult one. Presently we are being hu..... (95:581) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is vary unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The

senior division officer moves about with all the military man prot..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:6 My school environment is good, we have a good physical milieu, good ad..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

The time we use to teach has drastically reduced since 2016.Mondays are declared ghost-town and we are left with 4 out of 5 working days. Saturdays were used to meet up with the shortage though not very easily. There are months that we go for three weeks lockdown with no movement and no activities. Only God knows how children manage to pass national exams in this crisis regions. There are some divisions that students have not gone to school since November 2016.My school population is small therefore we are not affected by the shift system,by the way it cannot work in remote areas because of the disturbance of the boys in the bushes

3 Codes:

- **ITSS lockdown reduces instructional time**

5 Quotations

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169)

D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced soomuch in

my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS reduction in teaching time as modays are ghost town days**

7 Quotations

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:13 The instructional time has reduced because people send children to sch..... (6171:6732) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced soomuch in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS shift system is not applicable in my school**

3 Quotations

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

Instructional time assessment and time to prepare notes have greatly reduced in our environment. We the teachers likewise students spend time running up and down for safety. It is not the "things are getting back to normal that you people here on radio it is a life threatening situation that you are leaving your house to your jobsite without being sure to come back safely. Well, once we have the opportunity to teach, we try to give our best. It will one day be over, we do the shift system and this is not something to pray it continues. students come to school in the morning and close by 12 noon, the other classes start at 12:30 pm and close by 4:30pm for fear that if children don't go home early, they can encounter problems on their way home.

4 Codes:

- **ITSS reduction in teaching time as Mondays are ghost town days**

7 Quotations

1:9 The time we use to teach has drastically reduced since 2016. Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:13 The instructional time has reduced because people send children to sch..... (6171:6732) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced soomuch in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS Shift system is not good as time for the two shifts are disproportionate**

2 Quotations

1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All

over us from preparing lessons to going to teach..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS too much work for the teachers**

1 Quotations

1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **Life threats from separatist fighters**

8 Quotations

1:1 My work environment is a very difficult one. Presently we are being harassed..... (95:581) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia case..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:3 Just the identification document we carry exposes us to the separatist..... (940:1430) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:4 My work environment is very unsafe. We run from guns and cutlasses on..... (1432:1830) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:5 The senior division officer moves about with all the military man protection..... (1833:2403) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:6 My school environment is good. We have a good physical milieu, good administration..... (2405:3039) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactic materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:11 We live in fear. All over us from preparing lessons to going to teach..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

We live in fear, all over us from preparing lessons to going to teach in class. We don't have time for any serious update of notes that would have required because of threats and betrayal. School close down for up to three weeks sometimes and it makes it difficult to finish the years program with the insecurity in the region. The shift period of schools due to covid is a serious

problem here. We don't even have enough time to teach normally, then they come and reduce the teaching hours because of coronavirus.

3 Codes:

- **ITSS lockdown reduces instructional time**

5 Quotations

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381)
- D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the Anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced so much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS reduction in teaching time as Mondays are ghost town days**

7 Quotations

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381)
- D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:13 The instructional time has reduced because people send children to sch..... (6171:6732) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced so much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS Shift system is not good as time for the two shifts is disproportionate**

2 Quotations

1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear. All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

The length of teaching, preparation of notes and assessment time has greatly reduced. We had three periods of geography for first cycle per class per week but it has reduced to two periods and sometimes we stay for three weeks with no classes. The life of a teacher is very difficult here because we have no liberty to proudly say you are a teacher. My school doesn't go to shift system, we do the usual classes so we don't get into shift. In my personal opinion, I think it is a very bad option for a crisis region.

3 Codes:

- **ITSS lockdown reduces instructional time**

5 Quotations

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced soo much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS reduction in teaching time as mondays are ghost town days**

7 Quotations:

1:9 The time we use to teach has drastically reduced since 2016. Mondays are..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:13 The instructional time has reduced because people send children to sch..... (6171:6732) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced so much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

● **ITSS shift system is not applicable in my school**

3 Quotations:

1:9 The time we use to teach has drastically reduced since 2016. Mondays are (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:13 The instructional time has reduced because people send children to sch..... (6171:6732) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

The instructional time has reduced because people send children to school based on what they hear from amba boys, sometimes they just give news about no school and the parents will not send their children to school. It makes work very difficult for teachers and the scheme of work cannot be followed as programmed. We do the shift system but it is very costly for management and risky for the teachers and students. The number of teaching hours has reduced drastically yet our students will write certification examinations with those that go to regular school

3 Codes:

- **ITSS reduction in teaching time as modays are ghost town days**

7 Quotations:

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381)
- D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:13 The instructional time has reduced because people send children to sch..... (6171:6732) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced so much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS Schemes cannot be covered due to reduced time**

2 Quotations:

1:13 The instructional time has reduced because people send children to sch..... (6171:6732)
- D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS shift system is very costly to manage**

1 Quotations:

1:13 The instructional time has reduced because people send children to sch..... (6171:6732)
- D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

Instructional time has reduced due to the anglophone crisis and the covid pandemic. We have the same syllabus to cover yet the time to teach has reduced. It is very difficult to actually get to 70% of completion. I feel something has to be done with our syllabus like reducing to meet the exigencies of the present time. The shift system is not done in my institution because of the rural nature of the place and the few students in class. Most parents have removed their children to calm regions with relatives and only those whose parents don't have an option have remained in the villages.

5 Codes:

- **COVID 19 protocols**

4 Quotations:

1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced so much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS lockdown reduces instructional time**

5 Quotations:

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced so much in my institution. The covid..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS reduction in teaching time as Mondays are ghost town days**

7 Quotations:

1:9 The time we use to teach has drastically reduced since 2016. Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:13 The instructional time has reduced because people send children to sch..... (6171:6732) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced so much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS Schemes cannot be covered due to reduced time**

2 Quotations:

1:13 The instructional time has reduced because people send children to sch..... (6171:6732) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS shift system is not applicable in my school**

3 Quotations:

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

**1:15 Instructional time has not reduced so much in my institution. The covi.....
(7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION**

Text quotation

Instructional time has not reduced so much in my institution. The covid 19 has not greatly affected our teaching time. It is the separatist fighters that causes us to stay out of work for weeks. The Monday lockdown have been compensated by Saturday. Life is difficult because of threats and betrayal from friends and society at large. You no longer trust people because everyone is a potential enemy.

4 Codes:

- **COVID 19 protocols**

4 Quotations:

1:2 Faced with 2 crises keeps us preparing for the future. The ambazonia c..... (583:938) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:7 My work environment is good. Administration puts didactique materials..... (3041:3609) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced so much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS Betrayal for being a teacher causes lack of trust even within the school**

1 Quotations:

1:15 Instructional time has not reduced so much in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **ITSS lockdown reduces instructional time**

5 Quotations:

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and

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• **ITSS reduction in teaching time as Mondays are ghost town days**

7 Quotations:

1:9 The time we use to teach has drastically reduced since 2016.Mondays ar..... (3740:4381) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:10 Instructional time assessment and time to prepare notes have greatly..... (4384:5135) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:11 We live in fear .All over us from preparing lessons to going to teac..... (5137:5654) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:12 The length of teaching, preparation of notes and assessment time has g..... (5656:6169) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:13 The instructional time has reduced because people send children to sch..... (6171:6732) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:14 Instructional time has reduced due to the anglophone crisis and the co..... (6735:7327) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:15 Instructional time has not reduced soomuch in my institution. The covi..... (7330:7729) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:16 The online learning platform has come to stay. It is a very good initi..... (7784:8261) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

The online learning platform has come to stay. It is a very good initiative as students are given the opportunity to get the notes on topics that are further in the syllabus to meet up with the workload. We follow the platform by the ministry and the administration has created a whatsapp group for teachers and students. Teachers give assignments for students to do and bring for corrections. The major difficulty is the fact that most parents can't afford for their students.

3 Codes:

- **OLP good initiative and help to meet up with workload**

1 Quotations:

1:16 The online learning platform has come to stay. It is a very good initi..... (7784:8261) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **OLP helps in course coverage and assignment follow-up**

3 Quotations:

1:16 The online learning platform has come to stay. It is a very good initi..... (7784:8261) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:20 Giving notes online is good but not at the expense of the regular teac..... (9290:9531) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **OLP parents can't afford technological gadgets for their children**

5 Quotations:

1:16 The online learning platform has come to stay. It is a very good initi..... (7784:8261) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:18 This online learning is a very good notion but our students don't have..... (8706:9014) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:19 Online learning is good but the students don't have androids telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:22 The question is can every parent afford an android phone for each chil..... (9875:10254) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:17 What nonsense online learning platform with no electricity almost ever..... (8264:8704) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

What nonsense online learning platform with no electricity almost every day. How can we talk of an online learning platform when children don't have access to the technology? Who

buys the data bundle for students? With the difficult physical milieu, plague and bullets over the air. People living in pain and fear of the unknown, online learning is a fairy tale. The notion is good but its implementation in the rural milieu is not adaptative.

3 Codes:

- **OLP cannot be implemented in rural areas**

1 Quotations:

1:17 What nonsense online learning platform with no electricity almost ever..... (8264:8704)
- D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **OLP no electricity is a challenge**

1 Quotations:

1:17 What nonsense online learning platform with no electricity almost ever..... (8264:8704)
- D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **OLP students can't afford data bundles for studies**

4 Quotations:

1:17 What nonsense online learning platform with no electricity almost ever..... (8264:8704)
- D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:18 This online learning is a very good notion but our students don't have..... (8706:9014) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:19 Online learning is good but the students don't have androids telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:18 This online learning is a very good notion but our students don't have..... (8706:9014) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

This online learning is a very good notion but our students don't have telephones making it difficult and impossible to totally benefit from it. We need another version of the platform for

students to follow the classes or get the notes. Life is difficult with the seperatise fighters and the covid 19 pandemic

2 Codes:

- **OLP parents can't afford technological gadgets for their children**

5 Quotations:

1:16 The online learning platform has come to stay. It is a very good initi..... (7784:8261) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:18 This online learning is a very good notion but our students don't have..... (8706:9014) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:19 Online learning is good but the students don't have androids telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:22 The question is can every parent afford an android phone for each chil..... (9875:10254) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **OLP students can't afford data bundles for studies**

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1:17 What nonsense online learning platform with no electricity almost ever..... (8264:8704) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:18 This online learning is a very good notion but our students don't have..... (8706:9014) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:19 Online learning is good but the students don't have androids telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:19 Online learning is good but the students don't have android telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

Online learning is good but the students don't have android telephones and data buddle to get lessons. Even when teachers get the notes for them, photocopying is another "wahala". It is aa modern way of studying but it requires money and therefore not meant for the poor.

3 Codes:

- **OLP parents can't afford technological gadgets for their children**

5 Quotations:

1:16 The online learning platform has come to stay. It is a very good initi..... (7784:8261) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:18 This online learning is a very good notion but our students don't have..... (8706:9014) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:19 Online learning is good but the students don't have androids telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:22 The question is can every parent afford an android phone for each chil..... (9875:10254) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **OLP students can't afford data bundles for studies**

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1:17 What nonsense online learning platform with no electricity almost ever..... (8264:8704) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:18 This online learning is a very good notion but our students don't have..... (8706:9014) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:19 Online learning is good but the students don't have androids telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **OLP too demanding financial so not accessible to the poor**

3 Quotations:

1:19 Online learning is good but the students don't have android telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:22 The question is can every parent afford an android phone for each chil..... (9875:10254) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

**1:20 Giving notes online is good but not at the expense of the regular teac.....
(9290:9531) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION**

Text quotation

Giving notes online is good but not at the expense of the regular teaching periods. Corona doesn't exist only in the classroom. Why have markets and bars opened? It is a political decision to destroy our educational system, we need to be wise.

2 Codes:

- **OLP helps in course coverage and assignment followup**

3 Quotations:

1:16 The online learning platform has come to stay. It is a very good initi..... (7784:8261) -
D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:20 Giving notes online is
good but not at the expense of the regular teac..... (9290:9531) - D 1: FGD -TEACHERS
FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes,
revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH
WEST REGION

- **OLP it cannot replace the real life teacher**

1 Quotations:

1:20 Giving notes online is good but not at the expense of the regular teac..... (9290:9531) -
D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

**1:21 Online learning platforms are good sometimes, revision lessons on radi.....
(9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION**

Text quotation

Online learning platforms are good sometimes, revision lessons on radio and television are also good. We can't afford the technology for our children. This shouldn't affect the regular teaching time. I am personally not comfortable with the fact that our students have the urge for knowledge but don't have the necessary resources to get all.

4 Codes:

- **OLP helps in course coverage and assignment follow-up**

3 Quotations:

1:16 The online learning platform has come to stay. It is a very good initi..... (7784:8261) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:20 Giving notes online is good but not at the expense of the regular teac..... (9290:9531) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **OLP parents can't afford technological gadgets for their children**

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- **OLP students can't afford data bundles for studies**

4 Quotations:

1:17 What nonsense online learning platform with no electricity almost ever..... (8264:8704) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:18 This online learning is a very good notion but our students don't have..... (8706:9014) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:19 Online learning is good but the students don't have androids telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

- **OLP too demanding financial so not accessible to the poor**

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1:19 Online learning is good but the students don't have androids telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:22 The question is can every parent afford an android phone for each chil..... (9875:10254) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

1:22 The question is can every parent afford an android phone for each chil..... (9875:10254) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

Text quotation

The question is: can every parent afford an android phone for each child? or is education only for the rich? It is difficult for parents who are who have been disturbed for carrying out their economic activities to have money for android phones. Most at times we run from place to place to survive and manage to eat. The environment can only be understood by those who have faced it.

2 Codes:

- **OLP parents can't afford technological gadgets for their children**

5 Quotations:

1:16 The online learning platform has come to stay. It is a very good initi..... (7784:8261) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:18 This online learning is a very good notion but our students don't have..... (8706:9014) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:19 Online learning is good but the students don't have androids telephone..... (9017:9288) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:22 The question is can every parent afford an android phone for each chil..... (9875:10254) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

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3 Quotations:

1:19 Online learning is good but the students don't have androids telephone..... (9017:9288)
 - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:21 Online learning platforms are good sometimes, revision lessons on radi..... (9533:9873) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION / 1:22 The question is can every parent afford an android phone for each chil..... (9875:10254) - D 1: FGD -TEACHERS FROM THE NORTH WEST REGION

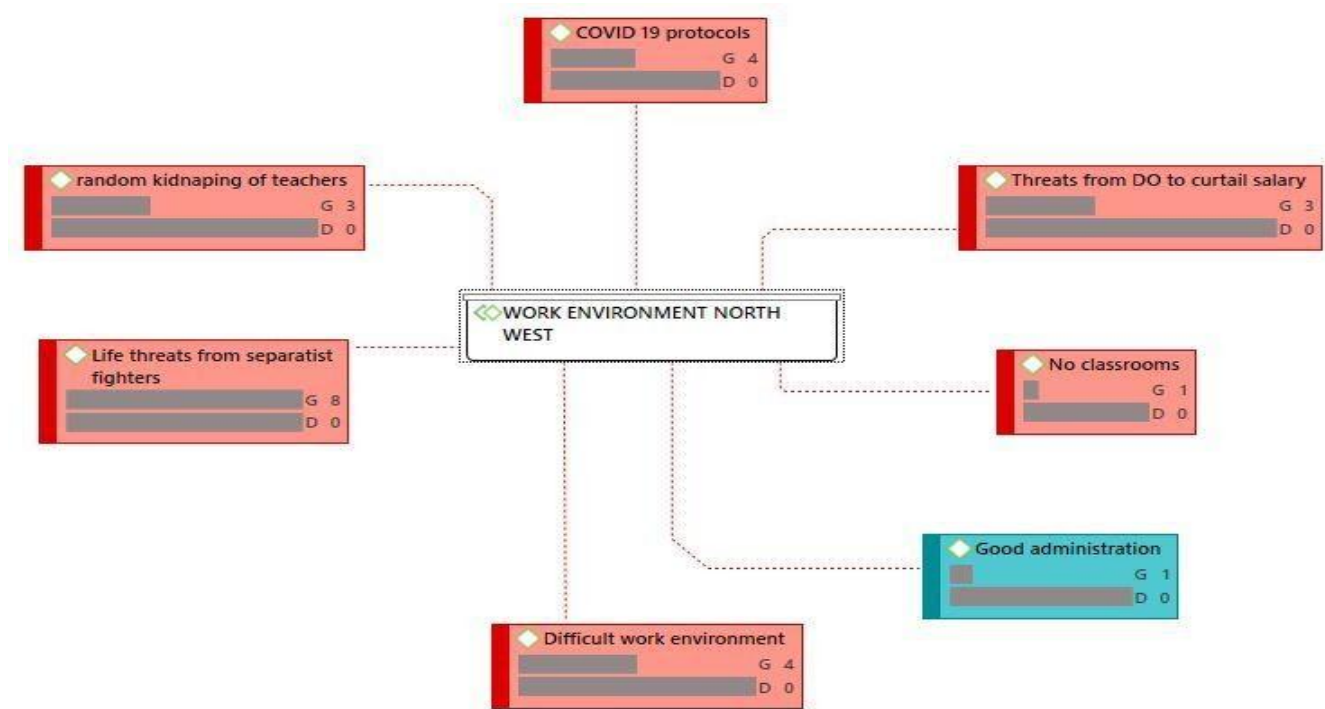


Figure 11: Qualitative indices of good and bad work environment in the North West region.

The code group in this analysis (work environment in the North West region) is based on two code themes (good work environment and uncomfortable environment). The teachers in the North west region expressed a dual mindset as concerns their working environment. The schema showcases the fact that 14.29% of the codes indicated that teachers have a good work environment with very low groundedness and density (G=1, D=0). The teachers insinuated that the school environment is good because they have a cordial working relationship with the school administration. The links between the codes and the quotations were non recursive which is an indication of good associative properties with very low groundedness.

On the other hand, 85.71% of the codes were associated to the fact that the work environment in schools in the North West region leaves much to be desired evinced through the high density of the second code theme (bad working environment). The teachers opined that

amongst the reasons why the school environment is uncomfortable includes but not limited to; Life threats from separatists' fighters (G=8, D=0), Kidnapping of teachers and demanding for ransom (G=3, D=0), COVID 19 protocols (G=4, D=0) which limits the rate of interaction and group activities in the classroom and due to the fact that classes always start late because students need to show up for sanitization of their hands and shoes before entering the classroom. At times the masks cause breathing difficulties to some students as well as nausea. Threats from the DO to curtail salaries (G=3, D=0). In the face of lockdowns and ghost towns teachers are still expected by the civil authorities to put their lives on the line by going to school. Teachers have lost their lives in the process, and the death toll keep rising while threats of salary cuts keep gaining momentum as many teachers have already lost their salaries. No classroom (G=1, D=0). Most school have been burnt down so students have relocated to areas termed as safe which has no structure of a classroom, no didactic materials, dilapidated benches and no staff room for teachers making the work environment very difficult. All the codes were non-recursive which is an indication of good associative properties with the quotations which in this case is considered as the theme-uncomfortable school environment.

Qualitative indices of good and bad work environment in the South West region

1 FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text document, 24 quotations

24 Quotations:

**1:1 My work environment is very good, I have a cordial relationship with m.....
(107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION**

Text quotation

My work environment is very good, I have a cordial relationship with my administration. Our time tables are given on time, didactique materials too, and we move to work though with a lot of threats. We have a big classroom with some old departmental meetings in there. Our students are hardworking, respectively and conscious of the difficulties we are also facing so they are ready to learn. Students come to school in colour dresses for fear to be identified by the separatist fighters. We stay sometimes three weeks without school but try put best to do extra work when we have the opportunity.

4 Codes:

- **cordial relationship with administration**

5 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good ,very nice for us students and teachers. We a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Good school environment**

4 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good, very nice for us students and teachers. we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **hardworking students**

3 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good, very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good,

the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Spacious multipurpose hall**

2 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good, very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:2 My school milieu is very difficult. I work in a place where schools ha..... (702:1146) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

My school milieu is very difficult. I work in a place where schools have been completely banned by separatist fighters. The only government school functioning is in Mamfe town. We the students and teachers have been moved to the town, working there is "all threatening ".What I really don't understand is the interest the so called separatist fighters have with teachers. Life is very difficult but we put in our best when we have the opportunity.

2 Codes:

- **Difficult school environment**

3 Quotations:

1:2 My school milieu is very difficult. I work in a place where schools ha..... (702:1146) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:5 Living in fear is how I will describe my work environment. It is very..... (1793:2444) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:8 My school environment is generally not good. We need not talk of the t..... (3080:3505) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Life threats from separatist fighters**

6 Quotations:

1:2 My school milieu is very difficult. I work in a place where schools ha..... (702:1146) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work

environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:5 Living in fear is how I will describe my work environment. It is very..... (1793:2444) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good, very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:8 My school environment is generally not good. We need not talk of the t..... (3080:3505) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

My work environment is being threatened because of the separatist fighters. My administration is good. The few students left are enthusiastic but we are not allowed to do our job. There are periods we stay in for 3weeks without going out, once we have the opportunity, we do our best.

2 Codes:

- **cordial relationship with administration**

5 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good ,very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Life threats from separatist fighters**

6 Quotations:

1:2 My school milieu is very difficult. I work in a place where schools ha..... (702:1146) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:5 Living in fear is how I will describe my work environment. It is very..... (1793:2444) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good ,very nice for us students and teachers.we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:8 My school environment is generally not good. We need not talk of the t..... (3080:3505) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

The school milieu is good, we have good toilets and staffroom for teachers' school administration is very responsible with timetable given on time and didatique materials come on time. Our students come to school with coloured dresses for fear of the unknown. They are really willing to learn but the fear of gunshots and amputations keeps most of them home.

4 Codes:

- **cordial relationship with administration**

5 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good ,very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE

SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Good school environment**

- 4 Quotations:**

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good ,very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Good toilets and staff room**

- 2 Quotations:**

1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Life threats from separatist fighters**

- 6 Quotations:**

1:2 My school milieu is very difficult. I work in a place where schools ha..... (702:1146) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:5 Living in fear is how I will describe my work environment. It is very..... (1793:2444) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good, very nice for us students and

teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:8 My school environment is generally not good. We need not talk of the t..... (3080:3505) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:5 Living in fear is how I will describe my work environment. It is very..... (1793:2444) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

Living in fear is how I will describe my work environment. It is very difficult to live in fear, you can't carry a notebook or talk of school all due to fear. Students are willing to go to school but the 5 years Anglophone crisis has brought back this region from its top literacy level. It is very unfortunate that only the very poor people with no relatives to take their kids from the villages that are left behind. At the beginning of each year, the council will mobilise and clear the school campus and the next day, threats will come from the boys. We are adapting to live in this milieu and we put in our maximum best once the opportunity arises.

2 Codes:

- **Difficult school environment**

3 Quotations:

1:2 My school milieu is very difficult. I work in a place where schools ha..... (702:1146) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:5 Living in fear is how I will describe my work environment. It is very..... (1793:2444) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:8 My school environment is generally not good. We need not talk of the t..... (3080:3505) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Life threats from separatist fighters**

6 Quotations:

1:2 My school milieu is very difficult. I work in a place where schools ha..... (702:1146) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good,

we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:5 Living in fear is how I will describe my work environment. It is very..... (1793:2444) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good, very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:8 My school environment is generally not good. We need not talk of the t..... (3080:3505) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:6 The school milieu is good, very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

The school milieu is good, very nice for us students and teachers we are having a good staff room and every head of department has an office. Our departmental meetings hold in our head of departments office. Our students are hardworking, respectful any studious. we are however disturbed sometimes bothered separatist fighters. Though we don't face much problems because we live in our school.

5 Codes:

- **cordial relationship with administration**

5 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good ,very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Good school environment**

4 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good ,very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

• hardworking students

3 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good ,very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

• Life threats from separatist fighters

6 Quotations:

1:2 My school milieu is very difficult. I work in a place where schools ha..... (702:1146) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:5 Living in fear is how I will describe my work environment. It is very..... (1793:2444) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good, very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:8 My school environment is generally not good. We need not talk of the t..... (3080:3505) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Spacious multipurpose hall**

2 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good, very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

My school milieu is good, the administration is very understandings and provides the basic didactique materials on time for teachers to prepare their work. The physical milieu is good with good staff toilets and students willing to learn.

4 Codes:

- **cordial relationship with administration**

5 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good ,very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Good school environment**

4 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school

milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good ,very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION.

- **Good toilets and staff room**

2 Quotations:

1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **hardworking students**

3 Quotations:

1:1 My work environment is very good, I have a cordial relationship with m..... (107:700) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good, very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:7 My school milieu is good, the administration is very understandings an..... (2841:3078) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:8 My school environment is generally not good. We need not talk of the t..... (3080:3505) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

My school environment is generally not good. We need not talk of the threats, gunshots, amputations and betrayal. Everybody is a suspect. You can't even think of trusting someone. Access to my school is like getting yourself into a death trap. We are sometimes dressed like mad people to go teach just so not to be identified. We manage to get to school and do our best but I honestly tell you that life is very difficult here.

2 Codes:

- **Difficult school environment**

3 Quotations:

1:2 My school milieu is very difficult. I work in a place where schools ha..... (702:1146) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:5 Living in fear is how I will describe my work environment. It is very..... (1793:2444) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:8 My school environment is generally not good. We need not talk of the t..... (3080:3505) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Life threats from separatist fighters**

6 Quotations:

1:2 My school milieu is very difficult. I work in a place where schools ha..... (702:1146) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:3 My work environment is being threatened because of the separatist figh..... (1148:1429) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:4 The school milieu is good, we have good toilets and staffroom for tea..... (1431:1791) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:5 Living in fear is how I will describe my work environment. It is very..... (1793:2444) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:6 The school milieu is good, very nice for us students and teachers we a..... (2447:2839) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:8 My school environment is generally not good. We need not talk of the t..... (3080:3505) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

The time I use to prepare notes, assessments and teach students have greatly reduced. Though the Monday lockdown s has compensated with Saturdays, there are times we stay on lockdown for weeks with no work. To make the situation worse, the corona virus pandemic has led to the reduction of hours in school. Students do shift system in some schools and others do regular school period. At the end of it all, they will write the same examination

4 Codes:

- **ITSS COVID lockdown and protocols has reduced instructional time**

3 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **ITSS disproportionate time in shift system is disadvantageous to the evening shift**

4 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situation..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **ITSS Ghost town has reduced instructional time**

6 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST

REGION / 1:16 The instructional time has reduced in all the classes am teaching . F..... (6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

● **its lockdown has drastically reduced teaching time**

6 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:16 The instructional time has reduced in all the classes am teaching . F..... (6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

Instructional time has reduced due to reduction in teaching hours by the Monday lockdowns and some impromptu lockdowns imposed by separatist fighters. The covid 19 pandemic has made the situation worse with the reduction of the number of teaching hours. My real worry is that why some students go to shift system 7:30am - 12:00 noon,12:30pm -5pm, others go from 7:30:am to 3:30pm. They all have to write the same exams, has our syllabus been adjusted to meet the reduction of instructional time?

4 Codes:

● **ITSS COVID lockdown and protocols has reduced instructional time**

3 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **ITSS disproportionate time in shift system is disadvantageous to the evening shift**

4 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **ITSS Ghost town has reduced instructional time**

5 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:16 The instructional time has reduced in all the classes am teaching . F..... (6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **itss Lockdown has drastically reduced teaching time**

6 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:16 The instructional time has reduced in all the classes am teaching . F..... (6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:11 Our school instructional time has not been reduced so much because the..... (4589:4822) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

Our school instructional time has not been reduced so much because the Monday lockdown has been compensated with Saturdays. We are equally not affected by the shift system because we are not populated, our classes are below 50 students

3 Codes:

- **ITSS intruactional time has not reduced**

2 Quotations:

1:11 Our school instructional time has not been reduced so much because the..... (4589:4822) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:14 Instructional time has not been affected in my institution. Just agree..... (5559:6041) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **ITSS unaffected by shift system due to small population**

2 Quotations:

1:11 Our school instructional time has not been reduced so much because the..... (4589:4822) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12

Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) -
D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Monday ghost towns have been substituted for Saturday**

2 Quotations:

1:11 Our school instructional time has not been reduced so much because the.....
(4589:4822) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:14

Instructional time has not been affected in my institution. Just agree..... (5559:6041) - D 1:
FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

**1:12 Instructional time has greatly reduced with the usual Monday lockdowns.....
(4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST
REGION**

Text quotation

Instructional time has greatly reduced with the usual Monday lockdowns and sometimes shut
down for up to 3 weeks. We are not motivated to prepare lessons, assessments or even attend
seminars to improve our knowledge. We can go in for the shift system because of the nature
of our environment

3 Codes:

- **ITSS Ghost town has reduced instructional time**

6 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional

time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4

WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has
greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH

TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we
are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM

THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because
of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST

REGION / 1:16 The instructional time has reduced in all the classes am teaching . F..... (6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **itss Lockdown has drastically reduced teaching time**

6 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:16 The instructional time has reduced in all the classes am teaching . F..... (6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **ITSS unaffected by shift system due to small population**

2 Quotations:

1:11 Our school instructional time has not been reduced so much because the..... (4589:4822) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:13 Instructional time has reduced we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

Instructional time has reduced, we are faced with a different situation of not knowing when to prepare lessons, when it is safe to go out and work and so private life is free from stress. We do the shift system but it is very stressful for both the teachers and students. Going to school

from morning and sometimes closing at 5pm is very stressful and tiring. It cannot be effectuated in my opinion especially when most teachers have left.

3 Codes:

- **ITSS disproportionate time in shift system is disadvantageous to the evening shift**

4 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **ITSS Ghost town has reduced instructional time**

6 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:16 The instructional time has reduced in all the classes am teaching . F..... (6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **its Lockdown has drastically reduced teaching time**

6 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:16 The instructional time has reduced in all the classes am teaching . F..... (6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:14 Instructional time has not been affected in my institution. Just agree..... (5559:6041) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

Instructional time has not been affected in my institution. Just agreed and fear that is killing us. We still teach as usual and so assessments, do seminars remotely and work on Mondays are no work days but we are matching it up with Saturdays. My school population is not much so we run the normal school period. My idea of the shift system is not very good at all. Most students stay home without their parents so don't know what they do home. I really feel sick for this situation

2 Codes:

- **ITSS instructional time has not reduced**

2 Quotations:

1:11 Our school instructional time has not been reduced so much because the..... (4589:4822) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:14 Instructional time has not been affected in my institution. Just agree..... (5559:6041) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **Monday ghost towns have been substituted for Saturday**

2 Quotations:

1:11 Our school instructional time has not been reduced so much because the..... (4589:4822) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:14 Instructional time has not been affected in my institution. Just agree..... (5559:6041) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

Instructional time has greatly reduced, not just because of the crisis but also due to covid 19 pandemic. The shift system of school to meet up with the exigencies of the pandemic is good but why are students going to school for more hours because their population is small? I think there should be a harmonisation on the number of study hours per week. I feel like some students are being cheated

4 Codes:

- **ITSS COVID lockdown and protocols has reduced instructional time**

3 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **ITSS disproportionate time in shift system is disadvantageous to the evening shift**

4 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional

time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **ITSS Ghost town has reduced instructional time**

6 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:16 The instructional time has reduced in all the classes am teaching . F..... (6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **its Lockdown has drastically reduced teaching time**

6 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST

REGION / 1:16 The instructional time has reduced in all the classes am teaching . F.....
(6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

**1:16 The instructional time has reduced in all the classes am teaching F.....
(6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST
REGION**

Text quotation

The instructional time has reduced in all the classes am teaching . From 3 periods per week to 2 periods per week is such a great reduction. we see the future as education to be Blake. This will be seen in the percentage pass of our national certification examination .The shift system of education can be changed,. Afterall in the markets that people sell and buy all day long without mask but they are still alive.

2 Codes:

- **ITSS Ghost town has reduced instructional time**

6 Quotations:

1:9 The time I use to prepare notes, assessments and teach students have gr..... (3648:4089)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:10 Instructional time has reduced due to reduction in teaching hours by t..... (4092:4587) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:12 Instructional time has greatly reduced with the usual Monday lockdowns..... (4826:5116) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:13 Instructional time has reduced, we are faced with a different situatio..... (5119:5556) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:15 Instructional time has greatly reduced, not just because of the crisis..... (6045:6440) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:16 The instructional time has reduced in all the classes am teaching . F..... (6443:6859) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

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1:17 The online learning platform is a good initiative to help our students..... (6912:7101) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

The online learning platform is a good initiative to help our students know how to use technology. It is however not feasible because most parents can't afford the device and the data unit.

2 Codes:

- **OLP help students know how to use technological gadgets for educational purposes**

2 Quotations:

1:17 The online learning platform is a good initiative to help our students..... (6912:7101) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:24 The online learning platform is good to help expose our children to m..... (8483:8603)

D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **OLP Most parents can't afford the technological gadgets**

7 Quotations:

1:17 The online learning platform is a good initiative to help our students..... (6912:7101) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:18 It can be a

good initiative if the students had telephones and electri..... (7103:7271) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:19 The online learning platform provides notes for students and revision..... (7273:7572) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:20 What online learning platform with no electricity. How can we consul..... (7574:7814) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:21 We are really pleased with the online platform form because it helps u..... (7816:8156) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:23 Online learning platform is good though parents can't afford it for th..... (8300:8480) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:24 The online learning platform is good to help expose our children to m..... (8483:8603) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:18 It can be a good initiative if the students had telephones and electri..... (7103:7271) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

It can be a good initiative if the students had telephones and electricity was available. It is difficult to have electricity continuously for two days without rupture.

2 Codes:

- **OLP Most parents can't afford the technological gadgets**

7 Quotations:

1:17 The online learning platform is a good initiative to help our students..... (6912:7101) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:18 It can be a good initiative if the students had telephones and electri..... (7103:7271) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:19 The online learning platform provides notes for students and revision..... (7273:7572) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:20 What online learning platform with no electricity. How can we consul..... (7574:7814) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:21 We are really pleased with the online platform form because it helps u..... (7816:8156) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:23 Online learning platform is good though parents can't afford it for th..... (8300:8480) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

/ 1:24 The online learning platform is good to help expose our children to m..... (8483:8603)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **OLP power failure**

3 Quotations:

1:18 It can be a good initiative if the students had telephones and electri..... (7103:7271) - D
1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:19 The online
learning platform provides notes for students and revision..... (7273:7572) - D 1: FGD4
WITH TEACHERS FROM THE SOUTH WEST REGION / 1:20 What online learning
platform with no electricity. How can we consul..... (7574:7814) - D 1: FGD4 WITH
TEACHERS FROM THE SOUTH WEST REGION

**1:19 The online learning platform provides notes for students and revision.....
(7273:7572) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST
REGION**

Text quotation

The online learning platform provides notes for students and revision lessons for students on television and radio about 2 months to examinations. It is very good initiative but parents don't have money to buy android telephones and airtime for students. Electricity wahala is also a serious problem.

3 Codes:

- **OLP make up for lost periods**

1 Quotations:

1:19 The online learning platform provides notes for students and revision..... (7273:7572) -
D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **OLP Most parents can't afford the technological gadgets**

7 Quotations:

1:17 The online learning platform is a good initiative to help our students..... (6912:7101) -
D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:18 It can be a

good initiative if the students had telephones and electri..... (7103:7271) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:19 The online learning platform provides notes for students and revision..... (7273:7572) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:20 What online learning platform with no electricity. How can we consul..... (7574:7814) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:21 We are really pleased with the online platform form because it helps u..... (7816:8156) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:23 Online learning platform is good though parents can't afford it for th..... (8300:8480) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:24 The online learning platform is good to help expose our children to m..... (8483:8603) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **OLP power failure**

3 Quotations:

1:18 It can be a good initiative if the students had telephones and electri..... (7103:7271) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:19 The online learning platform provides notes for students and revision..... (7273:7572) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:20 What online learning platform with no electricity. How can we consul..... (7574:7814) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:20 What online learning platform with no electricity. How can we consul..... (7574:7814) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

What online learning platform with no electricity? How can we consult the platform to know what has been done so that we don't give students same topics? the students themselves don't have telephones to go through these learning platforms.

2 Codes:

- **OLP Most parents can't afford the technological gadgets**

7 Quotations:

1:17 The online learning platform is a good initiative to help our students..... (6912:7101) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:18 It can be a good initiative if the students had telephones and electri..... (7103:7271) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:19 The online learning platform provides notes for students and revision..... (7273:7572) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:20 What online learning platform with no electricity. How can we consul..... (7574:7814) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:21 We are really pleased with the online platform form because it helps u..... (7816:8156) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:23 Online learning platform is good though parents can't afford it for th..... (8300:8480) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:24 The online learning platform is good to help expose our children to m..... (8483:8603) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **OLP power failure**

3 Quotations:

1:18 It can be a good initiative if the students had telephones and electri..... (7103:7271) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:19 The online learning platform provides notes for students and revision..... (7273:7572) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:20 What online learning platform with no electricity. How can we consul..... (7574:7814) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:21 We are really pleased with the online platform form because it helps u..... (7816:8156) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

We are really pleased with the online platform form because it helps us to go a long way with the students. They teach the topics which are further in the syllabus which is difficult for us to reach there. It is however regrettable that most parents can't afford android telephones for their children and the constant rupture of electricity.

2 Codes:

- **OLP Most parents can't afford the technological gadgets**

7 Quotations:

1:17 The online learning platform is a good initiative to help our students..... (6912:7101) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:18 It can be a good initiative if the students had telephones and electricity..... (7103:7271) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:19 The online learning platform provides notes for students and revision..... (7273:7572) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:20 What online learning platform with no electricity. How can we consult..... (7574:7814) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:21 We are really pleased with the online platform form because it helps u..... (7816:8156) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:23 Online learning platform is good though parents can't afford it for th..... (8300:8480) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:24 The online learning platform is good to help expose our children to m..... (8483:8603) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **OLP provide additional instructional time to complete the syllabus**

1 Quotations:

1:21 We are really pleased with the online platform form because it helps u..... (7816:8156) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

1:22 The online learning platform is a good initiative but for me should be..... (8158:8298) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

Text quotation

The online learning platform is a good initiative but for me should be done or used for revision because the notes can replace the teachers.

1 Codes:

- **OLP good initiative but should be used mainly for revision purposes**

1 Quotations:

1:22 The online learning platform is a good initiative but for me should be..... (8158:8298) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

**1:23 Online learning platform is good though parents can't afford it for th.....
(8300:8480) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST
REGION**

Text quotation

Online learning platform is good though parents can't afford it for their children. Some parents think that the children will use it for pornography and other related mal practices.

2 Codes:

- **OLP Most parents can't afford the technological gadgets**

7 Quotations:

1:17 The online learning platform is a good initiative to help our students..... (6912:7101) -
D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:18 It can be a
good initiative if the students had telephones and electri..... (7103:7271) - D 1: FGD4 WITH
TEACHERS FROM THE SOUTH WEST REGION / 1:19 The online learning platform
provides notes for students and revision..... (7273:7572) - D 1: FGD4 WITH TEACHERS
FROM THE SOUTH WEST REGION / 1:20 What online learning platform with no
electricity. How can we consul..... (7574:7814) - D 1: FGD4 WITH TEACHERS FROM
THE SOUTH WEST REGION / 1:21 We are really pleased with the online platform form
because it helps u..... (7816:8156) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH
WEST REGION / 1:23 Online learning platform is good though parents can't afford it for
th..... (8300:8480) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION
/ 1:24 The online learning platform is good to help expose our children to m..... (8483:8603)
- D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- **OLP promotes pornography and deviant behaviours**

1 Quotations:

1:23 Online learning platform is good though parents can't afford it for th..... (8300:8480) -
D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

**1:24 The online learning platform is good to help expose our children to m.....
(8483:8603) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST
REGION**

Text quotation

The online learning platform is good to help expose our children to modern technology but most parents can't afford.

2 Codes:

- OLP help students know how to use technological gadgets for educational purposes

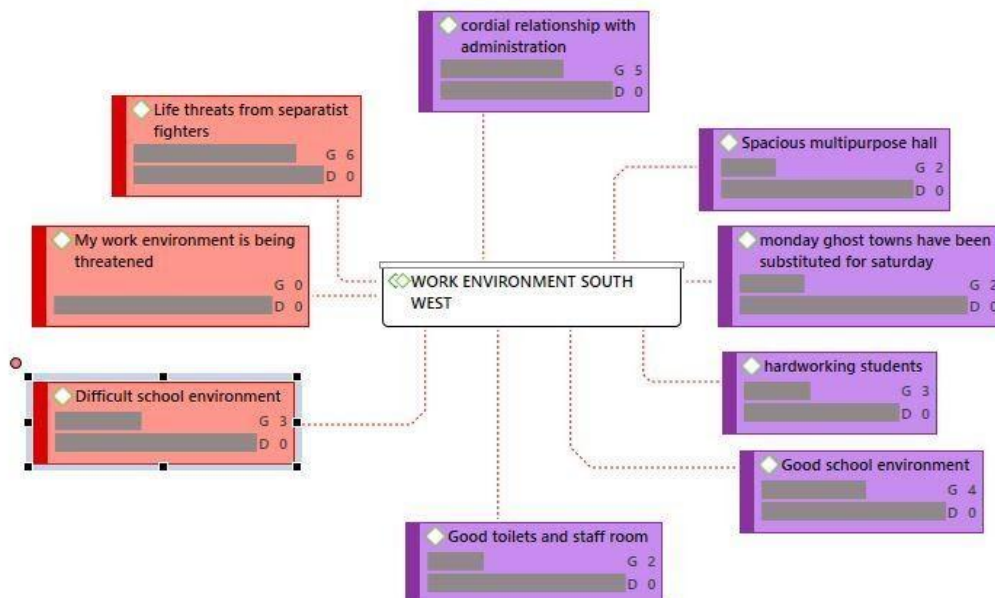
2 Quotations:

1:17 The online learning platform is a good initiative to help our students..... (6912:7101) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:24 The online learning platform is good to help expose our children to m..... (8483:8603) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION

- OLP Most parents can't afford the technological gadgets

7 Quotations:

1:17 The online learning platform is a good initiative to help our students..... (6912:7101) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:18 It can be a good initiative if the students had telephones and electri..... (7103:7271) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:19 The online learning platform provides notes for students and revision..... (7273:7572) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:20 what online learning platform with no electricity. How can we consul..... (7574:7814) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:21 We are really pleased with the



online platform form because it helps u..... (7816:8156) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:23 Online learning platform is good though parents can't afford it for th..... (8300:8480) - D 1: FGD4 WITH TEACHERS FROM THE SOUTH WEST REGION / 1:24 The online learning platform is good to help expose our children to m..... (8483:8603) -

Figure 12: Qualitative indices of good and bad work environment in the South West region.

The work environment in the South West region is the code group in this analysis which is based on two key code themes (good work environment and bad work environment). Teachers in the South West region expressed a dual mindset as concerns their work environment. The schema indicates that the work environment in the SW region is comparatively better than that of the North West (NW). The information gotten from the field indicates that 70% of the codes point to the fact that the work environment is conducive in most schools. The teachers insinuated that the school environment is conducive because of the following reasons; availability of good toilets and staff room (G=2, D=0), they explained that as a result of the crisis NGO have stepped in to better the face of the education sector. cordial relationship with administration (G=5, D=0). Most teachers accepted to have established very good working environment with their administration. The schools in the south west regions have spacious and multipurpose hall for large classroom size and for events (G=2, D=0), The teachers said Monday ghost towns have been substituted with Saturday classes which has greatly helped in catching up with lost periods (G=2, D=0). Most of the students on their part are showing commitment to hard work making interaction with them very easy (G=3, D=0). All the codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-good school environment.

Moreover, 30% of the codes were associated with the fact that the work environment in schools in the South West region is uncomfortable. Teachers asserted that they received life-threats from separatist fighters (G=6, D=0), the crisis generally make the school environment to be very threatening (G=3, D=0) as such instilling so much fear in the teachers though they still brave the odds to teach their students. The codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-uncomfortable school environment.

Table 28: Summary of work environment in the Southwest and Northwest Regions.

I	Code	Grounded	Density	Code Groups
•	Cordial relationship with administration	6	0	Work environment southwest and northwest regions
•	Good interaction with students	3	0	Work environment southwest region
•	Good toilets and staff room	2	0	Work environment southwest region better than northwest region
•	Life threats from separatist fighters	14	0	Work environment southwest and northwest regions
•	Threatening school environment	3	0	Work environment southwest region
•	threats from DO to curtail salaries	3	0	Work environment northwest region
•	Kidnapping of teachers for ransom	3	0	Work environment northwest region
•	Covid 19 protocol	4	0	Work environment northwest region work environment southwest region
•	no library	1	1	Work environment center region Work environment north region
•	poor administration	1	5	Work environment north region
•	poor performance	7	1	Work environment north region
•	Rough chalkboard	1	1	Work environment north region
•	small staff room with insufficient chairs and tables	9	3	Work environment center region Work environment north region
•	Saturday has replaced Monday ghost town	2	0	Work environment southwest region
•	Spacious staff room with chairs and tables	2	0	Work environment southwest region

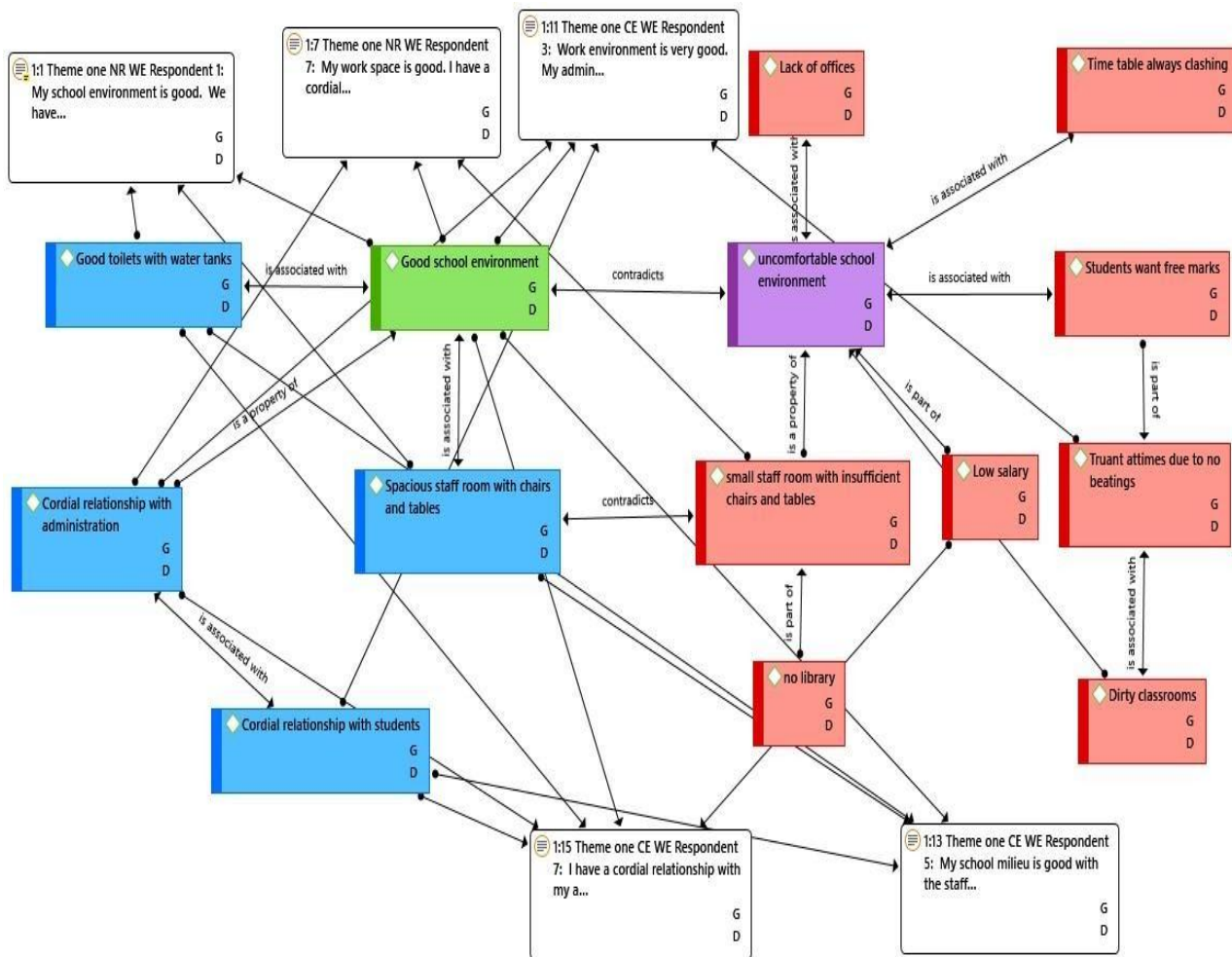


Figure 13: Quotations associated with good and bad work environment in the center region.

In this schema, the quotations were linked to the codes which they represent. It indicates that 60% of the quotations associated with good working environment emanated from the centre region while 40% of the quotations associated with bad working environment are from the Littoral region. This illustrates that schools in the center region had better working environment compared to those in the Littoral region of Cameroon. Teachers in the Littoral region however asserted that good work environment is associated to the fact that they have good toilets and water tanks as well as some schools having good staff rooms furnished with chairs supplied by NGOs as an intervention to better the quality of education by providing basic amenities. They equally reported to be having cordial relationship with their administrators hence making the working environment conducive. Summarily, the work environment in the center region is better as compared to the Littoral region due to the fact that the codes have a higher density and groundedness.

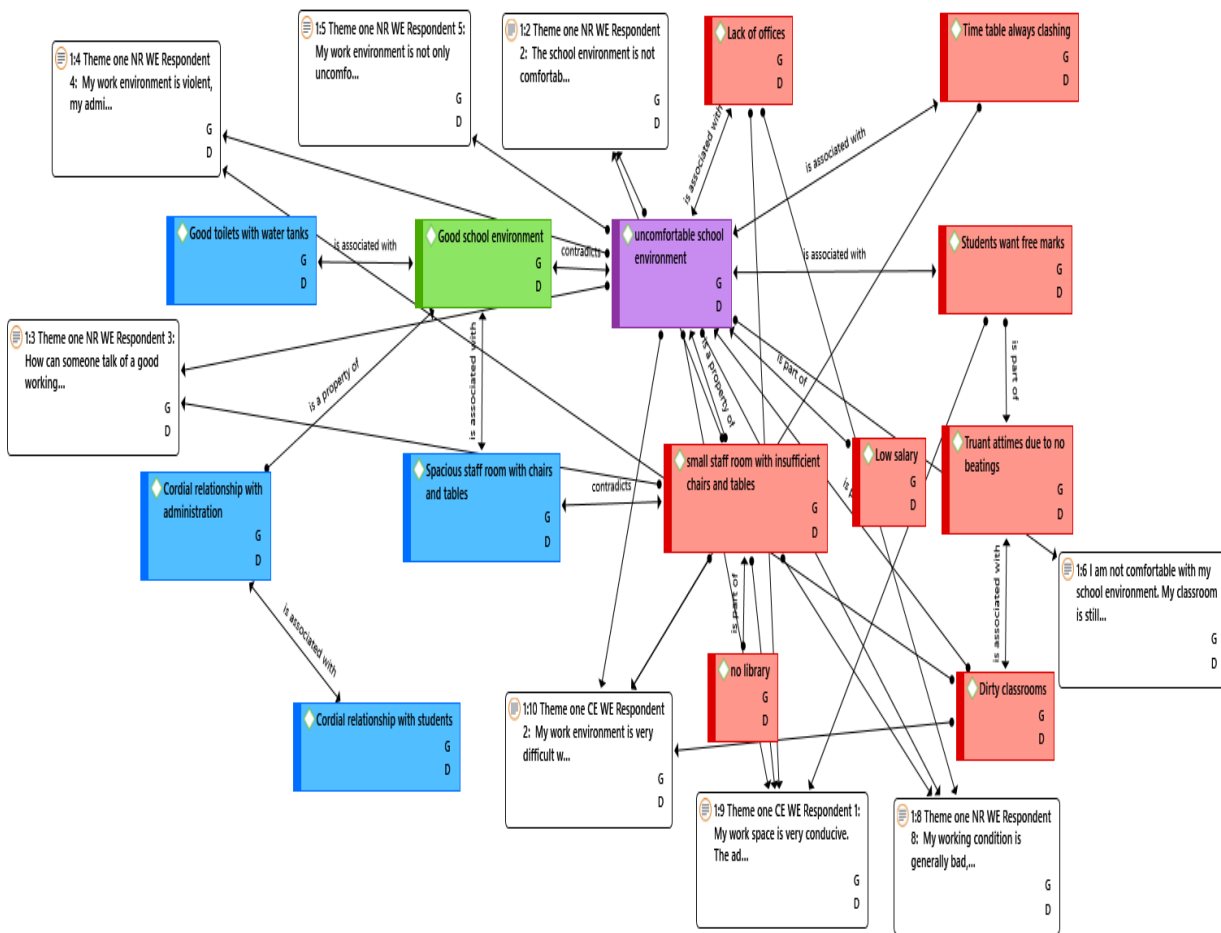


Figure 14: Quotations associated staff to Good and bad work environment in the Littoral region

Associated with bad work environment are schools in both center and Littoral regions of Cameroon. Based on the associative property of the codes and quotations, 75% of schools in the Littoral region were associated to bad or uncomfortable work environment buttressed by the fact that classrooms were always dirty, unavailability of library facility for research, and due to the fact that students are truants and quest for undue marks which sometimes lead to life traits. However, 25% of the bad environment is associated with schools in the center region which is explained by the fact that teachers complained of small staff rooms with insufficient chairs and tables, unavailability of offices and lack of library facilities, dirty classrooms and the desires for free marks in exchange for money. It is crystal clear from the aforementioned analysis that schools in the Littoral region are faced with work environment related challenges which affects the efficiency and effectiveness of the teaching and learning process

Table 29: Summary of work environment in the Littoral and Centre regions.

I	Code	Grounded	Density	Code Groups
•	Cordial relationship with administration	6	2	Work environment Littoral region work environment centre region
•	Cordial relationship with students	6	1	Work environment centre region
•	Dirty classrooms	2	2	Work environment littoral region work environment centre region
•	Excessive workload	4	1	Work environment littoral region
•	Good school environment	5	4	Work environment littoral region work environment centre region
•	Good toilets with water tanks	3	1	Work environment littoral region work environment centre region
•	Irregular absences	1	1	Work environment littoral region
•	Lack of offices	2	2	Work environment littoral region work environment centre region
•	Life threats from students if given low marks	1	2	Work environment littoral region
•	Little or no motivation	1	2	Work environment littoral region
•	Low salary	1	2	Work environment littoral region work environment centre region
•	no library	1	1	Work environment center region Work environment littoral region

●	poor administration	1	5	Work environment littoral region
●	poor performance	7	1	Work environment littoral region
●	Rough chalkboard	1	1	Work environment littoral region
●	small staff room with insufficient chairs and tables	9	3	Work environment center region Work environment littoral region
●	Spacious staff room with chairs and tables	2	2	Work environment littoral region work environment center region
●	Students are very rude	1	1	Work environment littoral region
●	Students want free marks	1	2	Work environment center region Work environment littoral region
●	Time table always clashing	1	1	Work environment center region Work environment littoral region
●	Truant at times due to no beatings	1	2	Work environment center region Work environment littoral region
●	uncomfortable school environment	8	10	Work environment littoral region work environment center region
●	violent environment	1	1	Work environment littoral region

Instructional time and shift system for Centre and Littoral regions

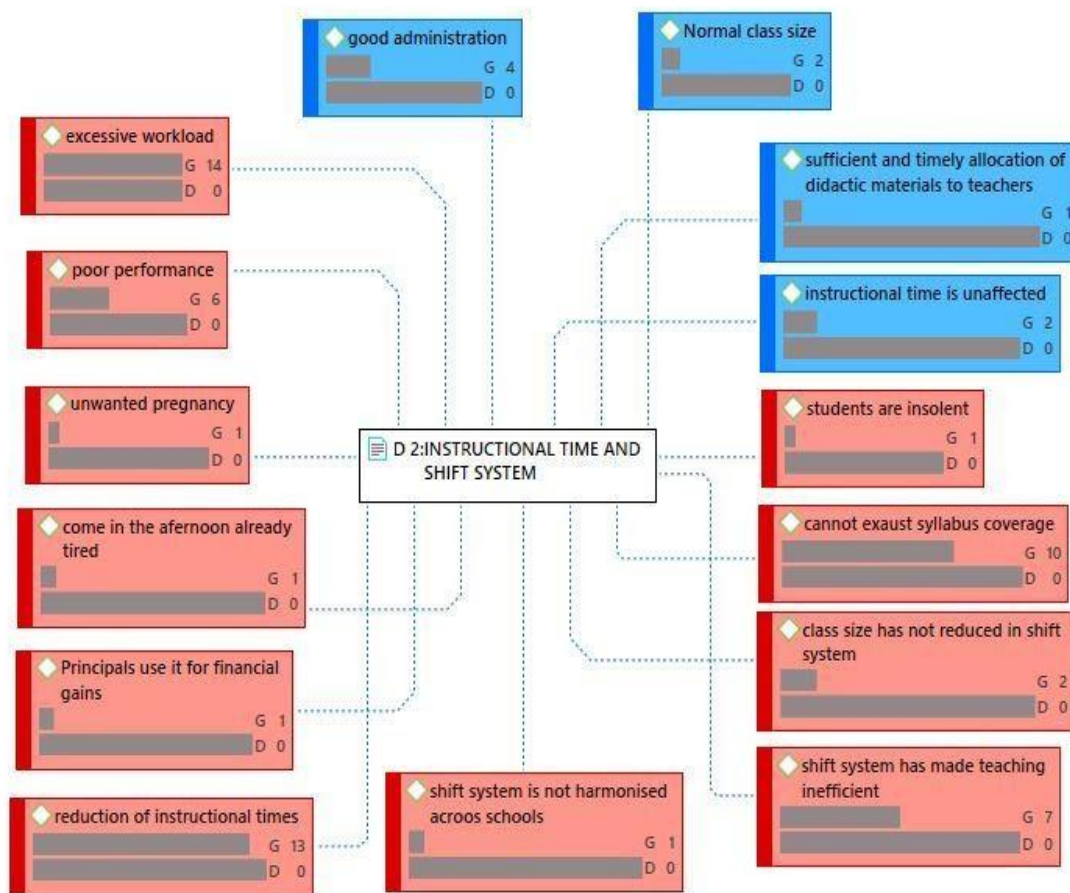


Figure 15: Qualitative indices of instructional time and shift system.

The co-occurrence codes in this schema emanated from D2 in the analysis canvas with their groundedness and density clearly evident via the frequency bars in the analysis. The groundedness illustrates the number of codes linked to a quotation while the parameter indicates the frequency of responses for the unique code

The analysis brings to light the fact that 73.3% of the codes indicate that the shift system is not a good one with numerous hitches clearly indicated with the red codes. The responses were thus indicated; the shift system has brought about the reduction of instructional time (G=13, D=0), which has led to excessive workload (G=14, D=0) and non-exhaustion of syllabus coverage (G=10, D=0). The effects are felt on student's poor performance (G=6, D=0). Some students and teachers alike are tired during afternoon sessions as such cannot maximize their functioning (G=1, D=0). Unwanted pregnancy has heightened as students sit

idle at home all day long and during evening shift some return home late from their boyfriends' homes (G=1, D=0). In some schools, the shift system has not witnessed a reduction in class size (G=2, D=0) due to the fact that the principals are using the system for financial gains (G=1, D=0). Some teachers have reported heightened levels of insolence as a result of the shift system (G=1, D=0) which is not harmonized across schools (G=1, D=0) hence making the teaching learning process ineffective and inefficient (G=7, D=0).

However, 26.7% of the teachers insinuated that the shift system is good due to the fact that they have good administrators who have structured the program so well (G=4, D=0) and have help teachers to maximize instructional time (G=2, D=0). Some of them said their class sizes are good (G=2, D=0) with sufficient and timely allocation of didactic materials to facilitate the teaching and learning process (G=1, D=0).

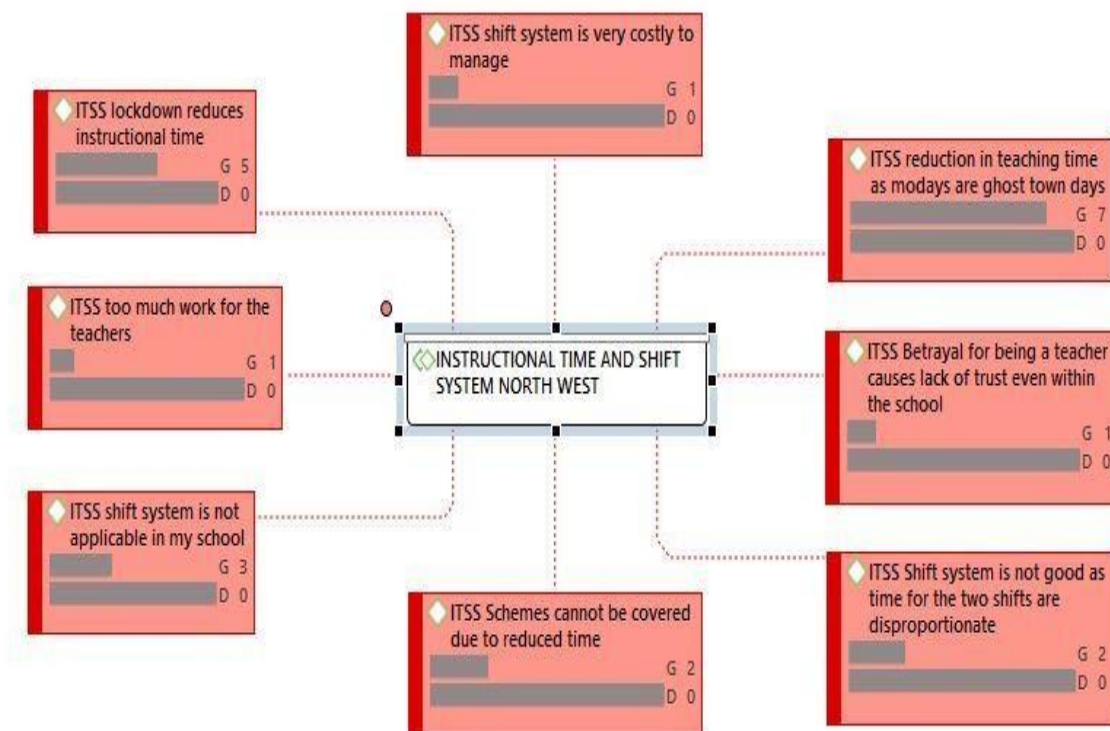


Figure 16: Instructional time and shift system of the North West region

The co-occurrence codes in this schema were from D3 quotations in the analysis canvas. The groundedness and density are represented with frequency bars in the analysis. The

groundedness illustrates the number of codes linked to a quotation while the parameter indicates the frequency of responses for the unique code

The analysis from responses of the North West region indicates that 100% of the codes are geared towards the fact that the shift system is not good with numerous hitches clearly indicated by the groundedness in the analysis. The responses were thus indicated; the shift system has brought about the reduction of instructional time dues to lockdowns and ghost towns (G=5, G=7, D=0), which have led to excessive workload for the teachers and rendering teaching ineffective (G=1, D=0) and non-exhaustion of syllabus coverage (G=2, D=0). The time for the two shifts is disproportionate, giving the second group a disadvantageous status (G=2, D=0). The evening shift put the teachers' lives in danger because they are often betrayed and tagged as black legs (G=1, D=0). Some of the codes indicate that the shift system is not applicable in some schools in the North West region (G=1, D=0). Some teachers have reported that the shift system is very difficult to manage (G=1, D=0). In a nutshell, all the teachers who were involved in the FGD saw nothing very valuable in a shift system but one which is full of disadvantages because of the uniqueness of the region in terms of the sociopolitical crisis.

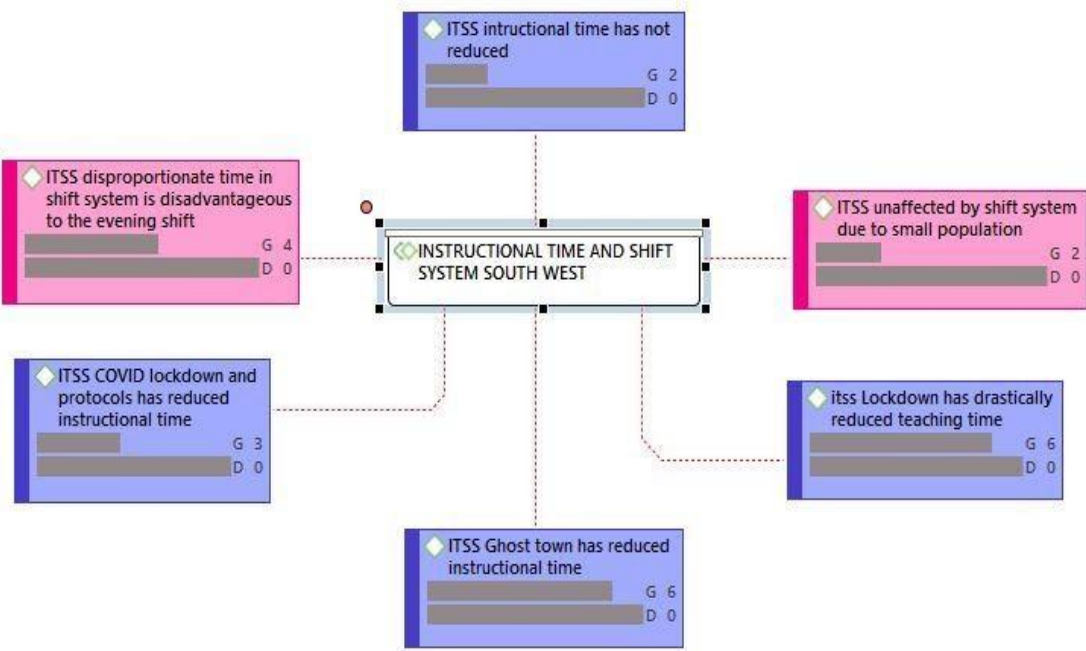


Figure 17: Instructional time and shift system of the South West region.

The co-occurrence codes in this schema came from D3 in the analysis canvas with groundedness and density clearly seen via the frequency bars in the analysis. The groundedness illustrates the number of codes linked to a quotation while the parameter indicates the frequency of responses for the unique code

The analysis indicates that 83.33% of the codes were geared towards the fact that the shift system is not a good one with numerous hitches clearly indicated by the groundedness. The responses were thus indicated; the shift system has brought about the reduction of instructional time due to the following reasons; lockdown and covid protocols (G=3, D=0), ghost town (G=6, D=0), lockdowns (G=6, D=0), which have led to non-exhaustion of syllabus coverage. The shift system is disadvantageous in the sense that the time for the morning and evening shifts are disproportionate (G=4, D=0). However, 16.67% of the teachers insinuated that instructional time is unaffected by the shift system due to the fact that they have a small population (G=2, D=0).

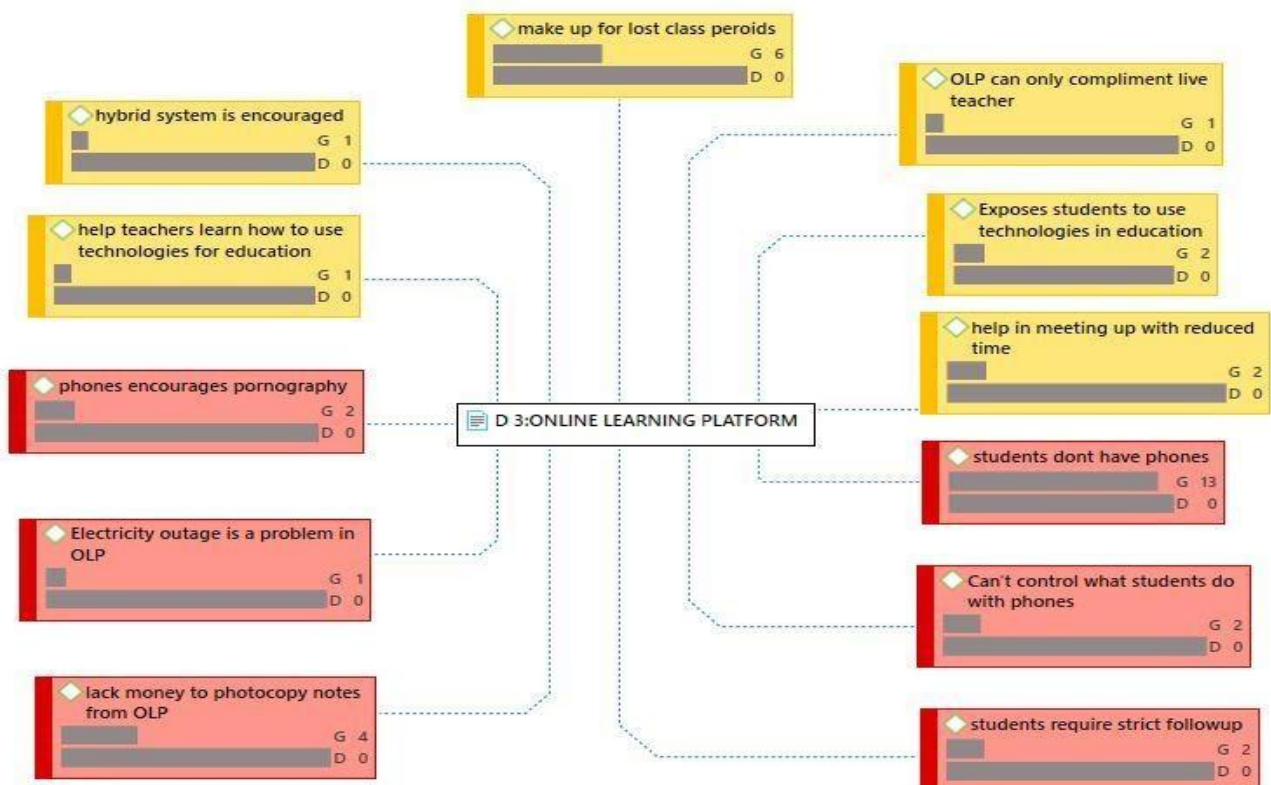


Figure 18: Qualitative indices of online learning platform

The codes in this schema came from D3 in the analysis canvas with their groundedness and density apparently via the frequency bars in the analysis loops. The groundedness illustrates the number of codes linked to a quotation while the values indicate the frequency of responses for the unique code

The analysis indicates that 50% of the teachers were of the opinion that online learning is not good because it poses a number of challenges which at the moment have not been looked into and are directly affecting the learner's ability to follow on with lessons. Some of such factors captured in this study include; the use of mobile phones or other electronic gadgets encourages pornography amongst young students (G=2, D=0). Frequent power outage is a major issue because electrical gadgets function with electrical charges and most often do not store for long hours (G=1, D=0), students complain that they do not have mobile phones or electronic gadgets to study online (G=13, D=0) and some who cannot afford electronic gadgets complain of not being financially viable to photocopy notes from the online learning platforms (G=4, D=0). Some of the teachers insinuated that they cannot control what students do with phones or electronic study gadgets (G=2, D=0), as such there is need for strict follow-up because some have indulged in scamming through such means (G=2, D=0).

Moreover, 50% of the teachers suggested that online learning is a pretty good means of passing across instructional content to learners in the phase of challenges. Some of the factors that foster online learning as insinuated by teachers includes; the ability to make up for lost class periods and reduced hours that the shift system introduced (G=6, D=0), help teachers to learn how to use technological gadgets for educational purposes (G=1, D=0) and also exposes students to use electronic devices in the teaching and learning process (G=2, D=0). Online learning helps to complement live teaching (G=1, D=0).

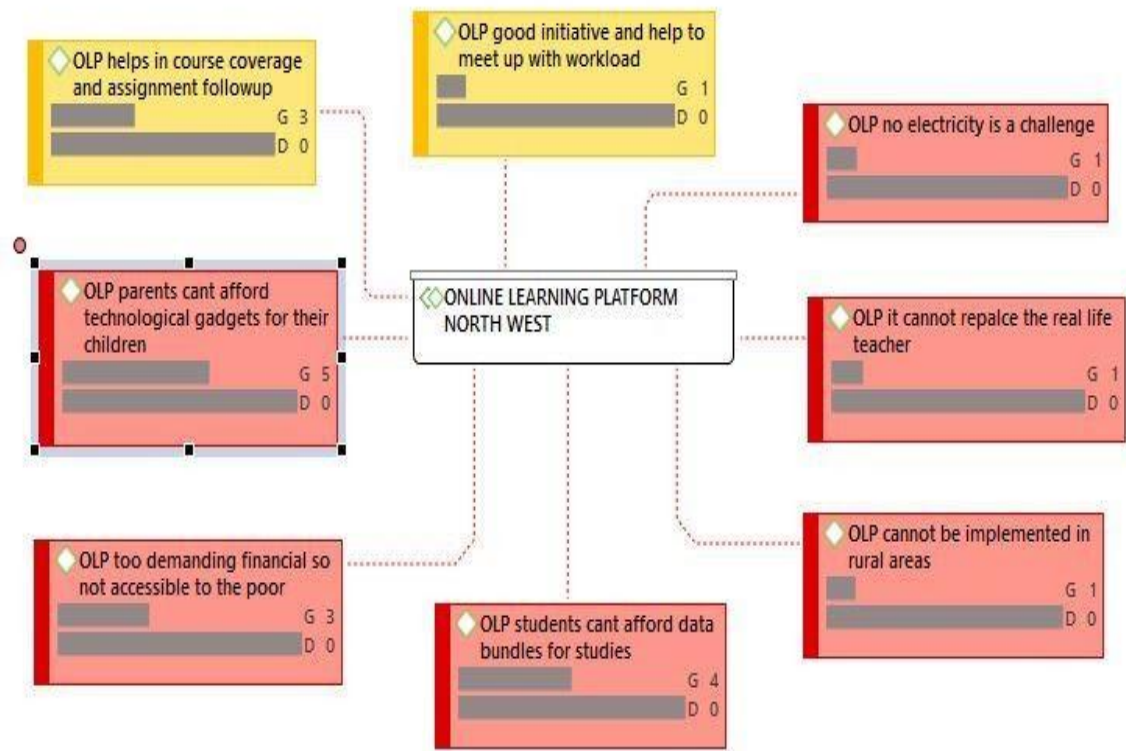


Figure 19: Online Learning platform for North West Region.

The codes in this schema emanated from D3 in the analysis canvas with the groundedness and density portrayed via the frequency bars in the analysis loops. The groundedness illustrates the number of codes linked to a quotation while the values indicate the frequency of responses for the unique code

The analysis indicates that 75% of the teachers in the North West region were of the opinion that online learning is not good because it posed a number of challenges which at the moment have not been looked into and are directly affecting the learner’s ability to follow up with lessons. Some of such challenges are captured in this study; frequent power outage is a major issue because electrical gadgets function with electrical charges and most often do not store current for long hours (G=1, D=0), students complain that their parents are not financially viable to purchase electronic gadgets for them to study online (G=5, D=0) and some who cannot afford electronic gadgets complain of not being financially viable to photocopy notes from the online learning platforms as such this mode of learning is too demanding financially and not meant for the poor (G=3, D=0). The students lack the financial resources to purchase data bundles (G=1, D=0), they asserted that this type of learning cannot be implemented in

rural areas (G=1, D=0) and learning through electronic means cannot replace the life teacher (G=1, D=0).

Moreover, 25% of the teachers suggested that online learning is a pretty good means of passing across instructional content to learners in the phase of challenges. Some of the factors that foster online learning as insinuated by teachers include; the ability to make up for lost class periods and reduced hours that the shift system introduced (G=1, D=0), help teachers to easily cover course content with little stress of travelling long distances to school (G=3, D=0)

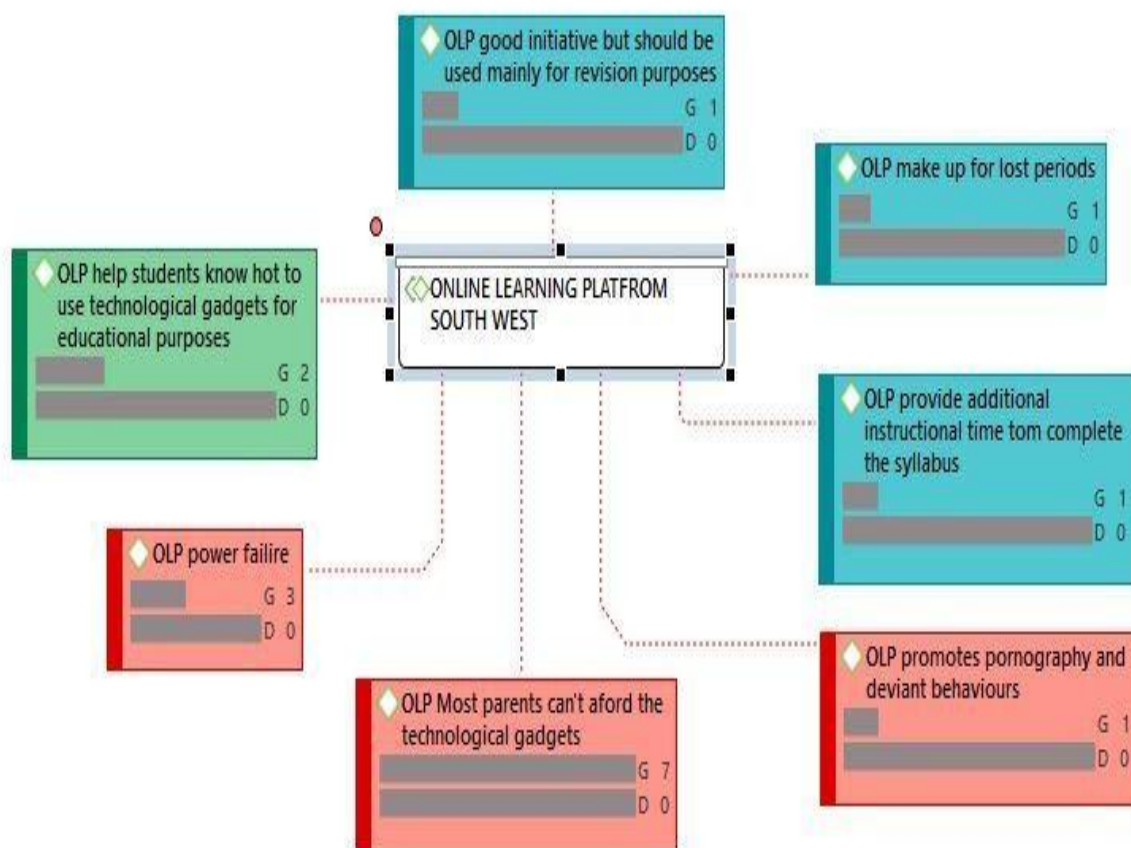


Figure 20: Online Learning platform for South West Region.

The co-occurrence codes in this schema emanated from D4 in the analysis canvas with the groundedness and density portrayed via the frequency bars in the analysis loops. The groundedness illustrates the number of codes linked to a quotation while the values indicate the frequency of responses for the unique code

The analysis brings to light the fact that 42.86% of the teachers in the South West region were of the opinion that online learning is not good because it poses a number of challenges which

at the moment have not been looked into and are directly affecting the learner's ability to follow up with lessons. Some of such challenges are captured in this study; frequent power failure is a major issue because electrical gadgets function with electrical chargers and most often do not store current for long hours (G=3, D=0), students complain that their parents are not financially able to purchase electronic gadgets for them to study online (G=7, D=0). The use of electric gadgets amongst students promotes pornography and deviant behaviors (G=1, D=0).

However, 57.14% of the teachers suggested that online learning is a very good means of passing across instructional content to learners in the phase of challenges. Some of the factors that foster online learning as stated by teachers includes; the ability to make up for lost class periods and reduced hours that the shift system introduced (G=1, D=0), help teachers to easily cover course content with little stress and complete their syllabuses on time (G=1, D=0), online teaching and learning is a very welcome initiative but should mainly be used for revision purposes because the learners are not yet very conversant with this means of instructional delivery (G=1, D=0). Finally, it helps students to learn how to use electronic gadgets for educational purposes to search for materials and to attend lectures (2=1, D=0).

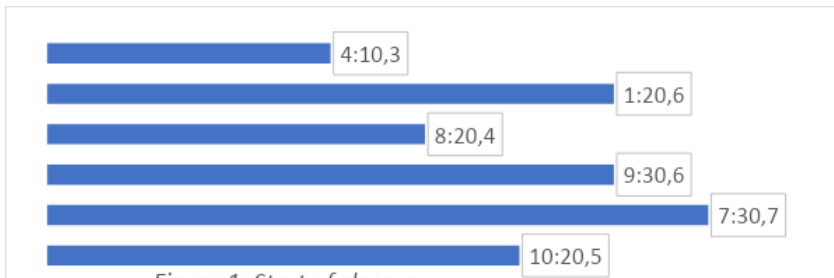


Figure 1: Start of classes

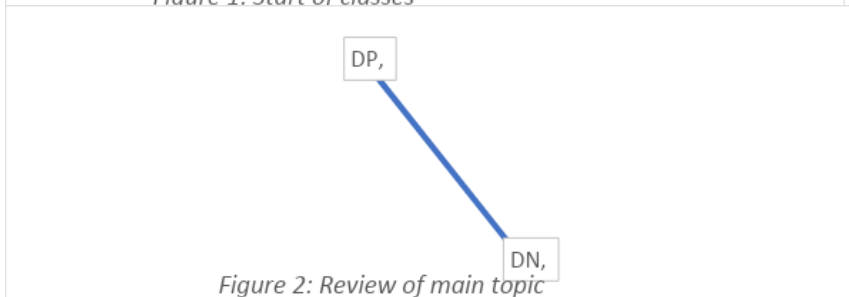


Figure 2: Review of main topic

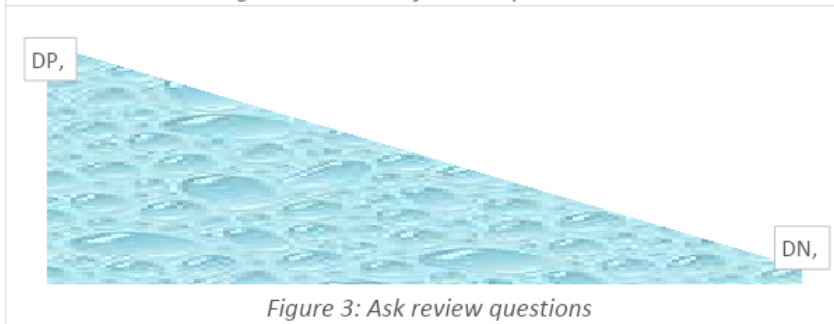


Figure 3: Ask review questions

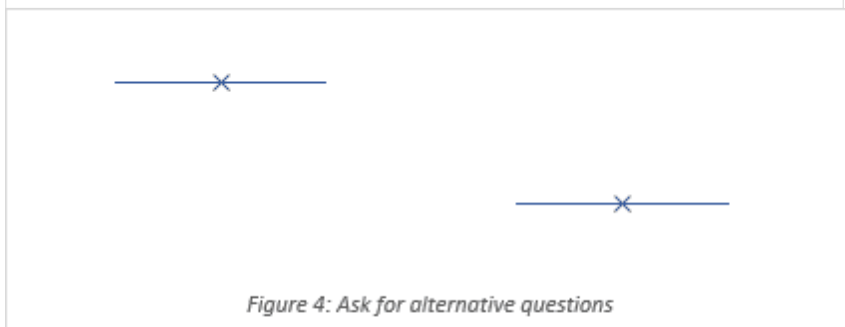


Figure 4: Ask for alternative questions



Figure 21: Observation protocol based on classroom practices at the introductory stage of a lesson

The observation schedule showcases a high level of grounded and density (G=7:30, D=7) based on the fact that classes started at 7:30am. The least observed occurrence proved that classes started very late in the evening with a low density (G=4:10, D=3). Most of the teachers commence their lessons with the review of the main topic which has a high density (G=P, D=29). Some started by asking review questions (G=P, D=28) and some by asking alternative questions in a humorous manner to gain students attention (G=P, D=23). Some teachers started their lessons by directly introducing the topic (G=P, D=28).

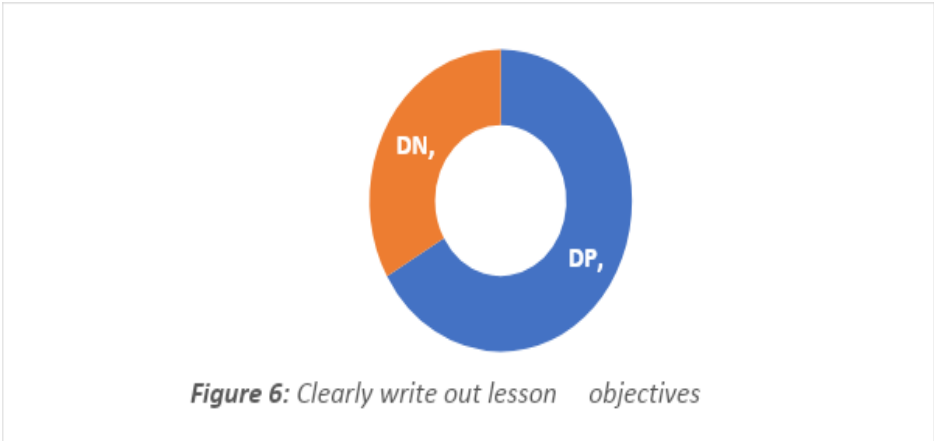
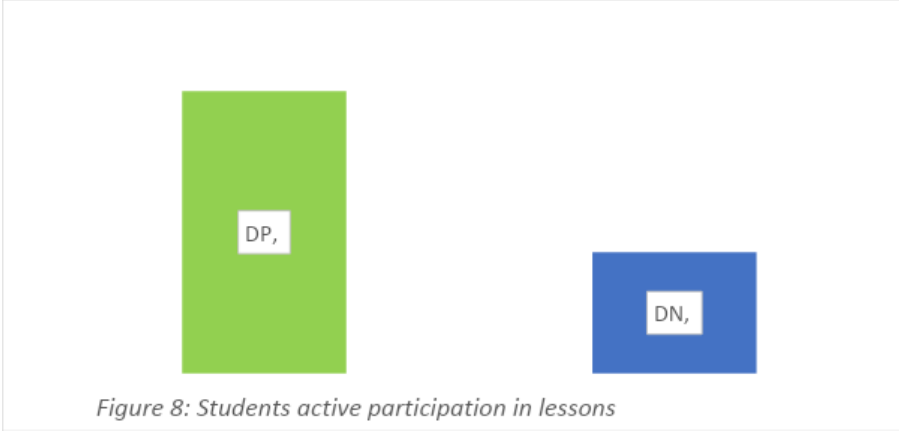
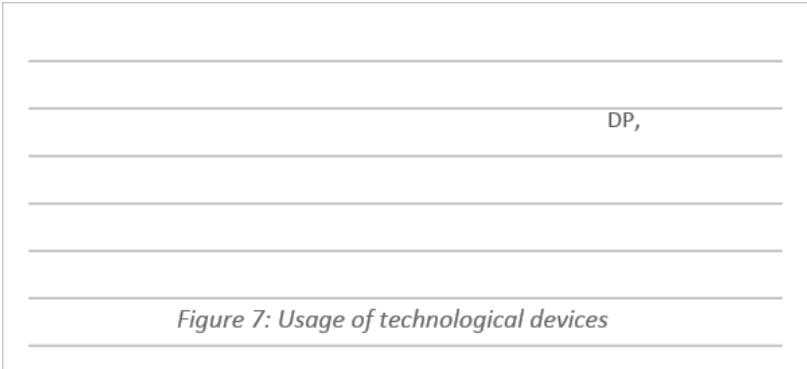


Figure 22: Observation protocol based on classroom practices at the presentation and evaluation stage of a lesson.



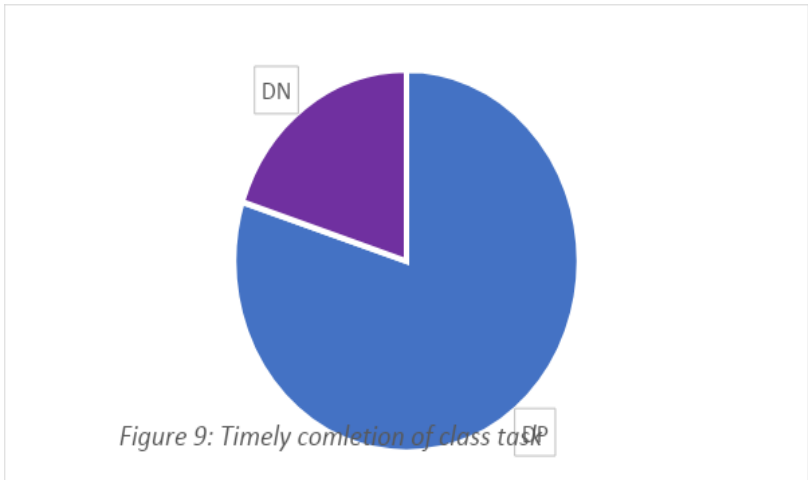


Figure 9: Timely completion of class task



Figure 10: Evidence of lesson mastery

The observation protocol indicates that teachers who wrote out the lesson objectives clearly had a higher density (G=P, D=20), some made use of technological devices in introducing lessons (G=P, D=24). Students who actively participated in class had a higher density (G=P, D=21), as well as those who completed class tasks in a timely manner (G=P, D=24). Finally, evidence of lesson mastery is predicated upon two factors with highest densities viz those who asked questions (G=P, D=9), and those who completed any assigned task in a timely manner (G=P, D=9).

CHAPTER FIVE: FINDINGS, DISCUSSIONS AND CONCLUSION

This chapter interprets the research results, revisits the research findings and relates the findings to existing research. It also provides explanations to new findings which came up as a result of this research.

5.1. Discussion of Findings

The different findings would be presented following the different research question. The results obtained in the study are here by compared to the results of other scholars as reported in the empirical review.

5.1.1. What relationship exists between teachers' qualification and the implementation of classroom assessment practices?

The research question investigates the link between teachers' qualification and its impact on the implementation of classroom assessment practices in English secondary schools in Cameroon. The questionnaire response shows that there is a significance difference between teachers' qualification and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon. This finding matches with the assertion of Ndongko and Tambo (2000), which assert that, by 1967, the poor performance in the educational system was attributed to the quality of teachers in view of the fact that, the success of any educational system depends on the quality of the teachers. This therefore places the teacher at the helm of the educational system.

The findings imply that further training expands teachers' competency in the assessment and evaluation of students. Similar findings have been reported by Robinson and Edwards (2012) who compared higher professionally trained teachers with alternatively certified teachers in USA. They reported that the higher professionally trained teachers outperformed their alternative certified teachers in all aspects of teaching job performance including assessment and evaluation.

5.1.2. What relationship exists between teaching experience and the implementation of classroom assessment practices?

The research question investigates the link between teachers' years of experience and its impact on the implementation of classroom assessment practices in secondary schools in Cameroon. The questionnaire response shows that there is no significant relationship between teachers' teaching experience and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon.

The observation protocol indicates that teachers who wrote out the lesson objectives clearly had a higher density (G=P, D=20), some made use of technological devices in introducing lessons (G=P, D=24). Evidence of lesson mastery is predicated upon two factors with highest densities viz those who ask questions (G=P, D=9), and those who completed any assigned task in a timely manner (G=P, D=9). Most of the teachers commenced their lessons with the review of the main topic which has a high density (G=P, D=29). Some started by asking review questions (G=P, D=28) and some by asking alternative questions in a humorous manner to gain students attention (G=P, D=23). Some teachers started their lessons by directly introducing the topic (G=P, D=28).

Across studies there is very limited support for the claim that beginning teachers are less competent than teachers with more years of experience. Previous research provides mixed evidence, with some correlations between teaching quality and teacher experience, however, these might be conceptualised. However, these findings are confined to a subset of areas of impact and windows of time. Other research provides no evidence that experience makes a difference.

Only a small number of studies have investigated the link between teaching experience and teaching quality using direct observation. For example, in North America, Stuhlman and Pianta (2009) investigated the relationship between years of teaching experience and teaching quality in 820 Grade 1 classrooms from 700 schools across 32 states using the Classroom Observation System for First Grade (COS-1; NICHD ECCRN, cited in Stuhlman & Pianta, 2009); an early prototype of the Classroom Assessment Scoring System (CLASS). Teachers' years of experience in this study ranged from less than one to 41 years. Four classroom types were identified: 1) positive emotional climate/lower academic demand, 2) high overall quality, 3) mediocre quality, and 4) low overall quality. No significant differences between the four classroom types were found in relation to teachers' years of experience.

In another North American study, Schachter, Spear, Piasta, Justice, and Logan (2016) investigated the effect of teaching experience on language and literacy instruction with 222 early childhood educators who had zero to 36 years teaching experience. This team used the Individualizing Student Instruction (ISI) classroom observation system (Connor, Piasta et al. cited in Schachter et al., 2016), which was adapted to focus on the language and literacy instruction provided in early childhood education settings. Teachers years of experience were found to be negatively associated with the amount of instruction, with less experienced teachers achieving significantly higher scores. A positive relationship between quantity of instruction, and teaching quality/student learning outcomes was assumed and not investigated in this study.

5.1.3. What relationship exists between class size and the implementation of classroom assessment practices?

The research question investigates the link between class size and its impact on the implementation of classroom assessment practices in secondary schools in Cameroon. The questionnaire response shows that there is no significant relationship between class size and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon. This study contradicts the literature of Rice 1999; O'Neill and Mercier, 2003.

The results of the current study do not support the position that teachers actually vary their assessment practices based on class size alone. The current study does not purport to account for the peripheral benefits of smaller classes, (such as, classroom management, more time for one-on-one interaction, more constructed-response assessments) that may positively affect more accurate assessment. Therefore, the current study contests the notion that teachers with smaller class sizes have demonstrated any preference for classroom assessment.

Also, observational research by Shapson, Wright, Eason, and Fitzgerald (1980), and reviews by Ehrenberg et al. (2001) and Slavin (1989) support the view that the effects of class size reductions on teaching are minimal

Shapson et al. (1980) found that there were no statistically significant differences between class sizes for most teacher activities, and teachers did not alter the proportion of time spent interacting with the whole class, with groups or with individuals. This conflicted with teachers' own experiences and there was, therefore, a gap between professional judgment and observational research findings

5.1.4. What relationship exists between teachers' motivation and the implementation of classroom assessment practices?

The research question investigates the link between teachers' motivation and its impact on the implementation of classroom assessment practices in secondary schools in Cameroon. The questionnaire response shows that there is a significant relationship between teachers' motivation and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon.

Since there is a significant relationship between teachers' motivation and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon, a further exploration of the relationship showed that the $\Gamma_{xy} = 0.24$ was positive. This indicates that the better the teachers' motivation the better the implementation of classroom assessment practices amongst secondary school teachers in Cameroon.

The results of the study match with that of Mertler (1992), who opines that satisfied teachers are generally more productive and can influence students' achievement.

Bowen (2000), equally supported this view when he noted that reward systems date back to the 18th century, when Taylor perceived and advanced theories and concepts of the economic man. He argued that man is predominantly motivated by economic gain and therefore the prospect of more pay is sufficient to bring about an increase in the desired performance.

5.1.5. What relationship exists between teachers' work environment and the implementation of classroom assessment practices?

The research question investigates the link between teachers' work environment and its impact on the implementation of classroom assessment practices in secondary schools in Cameroon.

A focus group discussion for teachers was used to collect data from the study area (North, Center, North West and South West regions) of Cameroon, ATLAS.ti v22.0 as qualitative software for the analysis. This discussion will be done region by region.

The code group in this analysis (work environment in Cameroon) is based on two code themes (good work environment and uncomfortable work environment). The teachers in the different regions all expressed a dual mindset as concerns their working environment.

The teachers in the center region expressed a dual mindset as concerns their working environment. The schema showcases the fact that 33% of the codes indicated that teachers have a good work environment with very low groundedness and density (G=0, D=4). The teachers insinuated that the school environment is good because of the following reasons associated to the first code theme; availability of good toilets and water tanks, spacious staffroom with chairs, cordial relationship with administration and cordial relationship with students. All the codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-good school environment.

Also, on the other hand 67% of the codes were associated to the fact that the work environment in schools in the center region leaves much to be desired evinced through the high density of the second code theme (G=0, D=9). The teachers opined that amongst the reasons why the school environment is uncomfortable includes but not limited to; The clashing of time tables, low salary, Students being truants, and the quest for free marks, dirty classrooms, lack of offices, absence of school library, the fact that the staffroom is small with insufficient chairs and tables. The codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-uncomfortable school environment.

Teachers in the North region expressed a dual mindset as concerns their work environment. The schema indicates that 20% of the codes indicates that teachers have a good work environment with a low groundedness and density (G=0, D=4). The teachers insinuated that the school environment is good because of the following reasons associated to the first code theme; availability of good toilets and water tanks, spacious staffroom with chairs and cordial relationship with administration. All the codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-good school environment.

Moreover, 80% of the codes were associated with the fact that the work environment in schools in the North region is uncomfortable, demonstrated by the high density of the second code theme (G=0, D=9). The teachers opined that amongst the reasons why the school environment is uncomfortable includes but not limited to; poor performance with little or no motivation could be a causative factor and is highly linked to poor administration which is considered a cause of lack of offices in school, low salary, Irregular absences for cattle rearing

which is associated with life threats from students if given low marks in examination, dirty classrooms, rough chalkboard, violent environment, rude students and excessive workload. The codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-uncomfortable school environment. The recursive paths had direct links with the causative codes.

The code group in this analysis (work environment in the North West region) is based on two code themes (good work environment and uncomfortable environment). The teachers in the Northwest region expressed a dual mindset as concerns their working environment. The schema showcases the fact that 14.29% of the codes indicated that teachers have a good work environment with very low groundedness and density ($G=1$, $D=0$). The teachers insinuated that the school environment is good because they have a cordial working relationship with the school administration. The links between the codes and the quotation were non recursive which is an indication of good associative properties with very low groundedness.

On the other hand, 85.71% of the codes were associated with the fact that the work environment in schools in the North West region leaves much to be desired evinced through the high density of the second code theme (bad working environment). The teachers opined that amongst the reasons why the school environment is uncomfortable includes but not limited to; Life threats from separatists' fighters, kidnapping of teachers and demanding for ransom, COVID 19 protocols which limit the rate of interaction and group activities in the classroom and due to the fact that classes always start late because students need to show up for sanitisation of their hands and shoes before entering the classroom. At times the masks cause breathing difficulties to some students, as well as, nausea. There are threats from the divisional officer to curtail salaries. In the face of lockdowns and ghost towns teachers are still expected by the civil authorities to put their lives on the line by going to school. Teachers have lost their lives in the process, and the death toll keep rising while threats of salary cuts keep gaining momentum as many teachers have already lost their salaries, limited number of classrooms. Most schools have been burnt down so students have relocated to areas termed as 'safe' which has no structure of a classroom, no didactic materials, dilapidated benches and no staff room for teachers making the work environment very difficult. All the codes were non-recursive which is an indication of good associative properties with the quotations which in this case is considered as the theme-uncomfortable school environment.

Teachers in the South West region expressed a dual mindset as concerns their work environment. The information gotten from the field indicates that 70% of the codes point to the fact that the work environment is conducive in most schools. The teachers insinuated that the school environment is conducive because of the following reasons; availability of good toilets and staff room, they explained that as a result of the crisis NGO have stepped in to better the face of the education sector. Most of the teachers accepted to have established very good working environment with their administration. The schools have spacious and multipurpose halls for large classroom size and for events. The teachers said Mondays ghost towns have been substituted with Saturday classes which has greatly helped in catching up with lost periods. Most of the students on their part are showing commitment of hard work making interaction with them very easy. All the codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-good school environment.

Moreover, 30% of the codes were associated with the fact that the work environment in schools in the South West region is uncomfortable. Teachers asserted that they receive life threats from separatist fighters, the crisis generally make the school environment to be very threatening as such instilling so much fear in the teachers, though they still brave the odds to teach their students. The codes were non-recursive which is an indication of good associative properties with the quotation which in this case is considered as the theme-uncomfortable school environment.

The observation protocol indicates that teachers who wrote out the lesson objectives clearly had a higher density (G=P, D=20), some made use of technological devices in introducing lessons (G=P, D=24). Also, students who actively participated in class had a higher density (G=P, D=21), and completed class tasks in a timely manner (G=P, D=24). Finally, evidence of lesson mastery is predicated upon two factors with highest densities viz those who asked questions (G=P, D=9), and those who completed any assigned task in a timely manner (G=P, D=9).

5.2. Conclusion

This section presents a briefing of the different chapters and the findings of the research.

The introductory chapter, chapter one started with the background of the study. The historical evolution and contextual background showed a picture of evolution and the present context of the variables in the study, from antiquity to the time of the research. This gave way for the

objectives to be announced. The study had five objectives, with the main objective being ‘To investigate how teachers’ characteristics impact the implementation of classroom assessment practices in English secondary schools in Cameroon’. This objective gave us our main research question which is ‘Does a relationship exist between teachers’ characteristics and the implementation of classroom assessment practices in English secondary schools in Cameroon?’ This study was deemed relevant because classroom assessment provides teachers with information about what students know and can do, it guides teachers to plan effective instructions, teachers know what students misunderstand and where the misconception lies. The study was, however, limited to English secondary school teachers in the four selected regions in Cameroon. In order to answer our research questions, we engaged into a review of related literature. There was the conceptual review which exposed the variables to the readers, 2 models and 5 related theories were reviewed and the efforts made by earlier scholars to answer the research questions were also reviewed under the empirical review.

In order to carry out the investigation, we used the mixed research design and limited the area of study to the Centre, Littoral, Northwest and Southwest regions which were purposively selected. The population of the study was selected purposively for the qualitative research and also by sampling for the quantitative study. A total of 278 teachers answered the questionnaires and 556 students responded to the questionnaires meant to assess teachers by their students. In order to get a greater depth of our problem, a non-participant observation of 30 classrooms was also carried out. To answer the fifth research question on teachers’ work environment, a focus group discussion was carried out with the teachers of the different regions selected by show of interest, from the population of the study of the different regions. The focus group discussions were done using the zoom platform. In order to ensure validity of the instruments, consultations were made; 4 course mates, 2 measurement experts the supervisor being one of them, and a psychologist were consulted and their suggestions helped to adjust the instruments. To ensure reliability of the instruments, a trial-test was conducted on 50 teachers and the results analysed using the Cronbach Alpha reliability coefficient. The analysis results proved that the instruments were reliable. The teachers used for the trial-test were not involved in the research proper. The data collected were placed in a data coding table for analysis. The qualitative data was analysed using the ATLAS.ti v22.0, while the quantitative data was analysed using the one-way analysis of variance and Pearson Product Moment Correlation Analysis with the following results.

The analysis of the responses from the questionnaire shows that there exists a significant relationship between teachers' qualification and the implementation of classroom assessment practices in Cameroon. The null hypothesis was therefore rejected. This indicates that qualified teachers carry out better assessment practices than those teachers with no teaching qualification. Since there is a significant relationship between teachers' qualification and the implementation of classroom assessment practices amongst secondary school teachers in Cameroon, a further pattern of the influence was explored using the Fisher's Least Significant Difference (LSD) multiple comparison analysis. The results of the analysis shows that the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon when the teachers' qualification is high is not significantly different from the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon when the teachers' qualification is good.

The study also came out with a positive relationship on the influence of teachers' motivation and the implementation of classroom assessment practices in English secondary schools in Cameroon, using the Pearson Product Moment Correlation. A further analysis using the Fisher's Least Significant Difference (LSD) multiple comparison analysis further shows that the better the motivation, the better the implementation of classroom assessment practices.

Contrarily, two of the null hypotheses were accepted. The study indicated that there is no significant relationship between teachers' teaching experience and the implementation of classroom assessment practices amongst English secondary school teachers in Cameroon. The study also reveals that class size does not influence teachers' implementation of classroom assessment practices in secondary schools in Cameroon.

The focus group discussions show that the work environment of English secondary school teachers in Cameroon is up to 75.75% uncomfortable; as teachers opined that amongst the reasons why the school environment is uncomfortable includes but not limited to; Life threats from separatists' fighters, Kidnapping of teachers and demanding for ransom, COVID 19 protocols which limits the rate of interaction and group activities in the classroom and due to the fact that classes always starts late because students need to show up for sanitisation of their hands and shoes before entering the classroom. In the face of lockdowns and ghost towns teachers are still expected by the civil authorities to put their lives on the line by going to school. Teachers have lost their lives in the process, and the death toll keep rising while threats of salary cuts keep gaining momentum as many teachers have already lost their salaries.

Exit examination scores also often reflect the country's political landscape. Just one year before the outbreak of the COVID Pandemic, improving success rates actually sparked political controversy, following a dramatic uptick, of nearly 31 percent, in passing rates for both the GCE Ordinary Level and Advanced Level between 2018 and 2019. The rapid improvement alarmed many observers and stirred up accusations that the government had inflated grades to support a narrative that conditions in Anglophone Cameroon had normalized. Others attributed the improvement to the successful relocation of displaced Anglophone students to schools in safer regions. Either way, the Minister of Secondary Education, appointed in 2018 as the first Anglophone minister to hold the position, thanked all stakeholders for a "hitch-free" examination session. In general, success rates in lower and upper secondary exit examinations in both the Francophone and Anglophone systems are low. For example, the BEPC's all-time high success rate is just 73 percent, achieved in 2019.

The educational disruptions caused by the COVID-19 pandemic, which appeared in Cameroon in March 2020, dramatically worsened the situation, causing examination scores to plummet across the board. In 2020, just 60 percent of students passed the BEPC, while Baccalauréat scores fell from 61 percent in 2019 to 47 percent the following year. Similarly, the success rate in the GCE AL declined from 78 percent in 2019 to 70 percent in 2020. The reason for the decline is obvious. The health crisis severely disrupted education in Cameroon. In March 2020, students around the country were sent home to prevent the spread of the covid 19 pandemic. Shortly thereafter, the various ministries of education decided to introduce remote teaching, encouraging schools to provide daily instructions through a variety of platforms, such as, videoconferencing, simple voice calls, text messaging and WhatsApp. Education ministries also partnered with the government-owned television provider Cameroon Radio Television (CRTV) to broadcast "School on TV," a televised education program aimed at preparing students for upcoming national examinations.

But distance education technologies are equally not accessible to all Cameroonians. With more than three-quarters of rural Cameroonians lacking access to electricity and nearly a quarter of rural residents living in areas lacking a mobile phone network, many of the country's least advantaged students were completely cut off from schooling. These disparities in access to distance learning technologies helped drive massive regional differences in examination scores. In 2020, in Cameroon's well-connected and developed Littoral and Central regions, BEPC pass rates averaged 73 percent. In two of its most remote regions, the North and Far North, BEPC pass rates were under 42 percent.

5.3. Recommendations

This study came out with a number of recommendations based on the findings.

1. Qualification is a crucial aspect in every sector of the economy. Teachers' qualification should be given due consideration in our educational system. Teachers must undergo a professional training and obtain a teaching qualification before they can start teaching. All those in classrooms without a professional teaching diploma should be expelled from the teaching core.
2. The training of teachers should be more intense and serious attention be given to training on classroom assessment.
3. Professional development for teachers should be compulsory for all teachers and the intensification of impregnation programs termly.
4. Introduction of soft skills education plays an essential role in shaping attitudes and culture. Its impact includes increase in employability, business and economic understanding, increased confidence levels and motivation. It helps recipients to realise their existing talents and strength and develop a wider belief that they can succeed. Soft skill education leads to enhanced self-esteem, cultural values and work ethics.
5. The need to increase and encourage motivation to teachers from both the government and private shareholders. The government should regularise the training and recruitment of teachers in the private sector.

5.4. Suggestions for Further Research

This research opens the way for further research into the influence of teacher professional and academic qualification on learning outcome. Also, a further research into the qualification framework for various degree or diplomas should be investigated and teachers' opinion on learning outcomes among students.

The class size debate should be intensified and a strict respect of teacher-student ratio should be respected.

REFERENCES

- Abadzi, H. (2009). *Instructional Time Loss in Developing Countries: Concepts, Measurement, and Implications*. *The World Bank Research Observer* 24(2)
DOI:[10.1093/wbro/lkp008](https://doi.org/10.1093/wbro/lkp008)
- Adams, E. L., & Hsu, J. Y. (1998). *Classroom assessment: Teachers' conceptions and practices in mathematics*. *School Science and Mathematics*, 98(4), 174–180.
- Adams, J. (2002). *The case of Modern Foreign Languages*. In Menter, I., Hutchings, M., and Ross, A. (Eds.), *The Crisis in Teacher Supply. Research and strategies for retention* (pp. 87-100). Stoke on Trent: Trentham.
- Adeyemi M.B. & Augustus A. Adeyinka (2003): *The principles and content of African traditional education*. *Educational Philosophy and Theory* 35 (4):425–440
- Agborbechem, P. T., and Frinwie, B. N. (2013) *School Based Assessment Practices as Predictors of Final Grades in Examinations Organised by the Cameroon GCE Board*. *Journal of Education* 8, 87- 92.
- Akinfe, E, Olofinniyi, O.E., &Fashiku C.O. (2012). *Teachers' Quality as Correlates of Students Academic Performance in Biology in Senior Secondary Schools of Ondo State, Nigeria*. *Online Journal of Education Research*, 1(6), 108-114.
- Akyeampong, A., (2003). *Review of Secondary Education in Ghana, Accra; World Bank*
- Akyeampong, K. Pryor, J. and Ampiah, J. (2006): *A Vision of Successful Schooling: Ghanaian Teachers' Understandings of Learning, teaching and Assessment*. *Competitive Education*, 42(2): 155-176. DOI: [10.1080/030500606006279936](https://doi.org/10.1080/030500606006279936)
- Akinpelu, J. A. (1981). *An introduction to philosophy of Education*. London: MacMillan Press Ltd
- Akyeampong, A, and Bennell, P, (2007). *Teacher Motivation in Sub-Sahara Africa and South Asia; Education Paper*.
- Alexander, A. (1984). *Student Involvement: A Development Theory for Higher Education*. *Journal of College Student Development*. 40. 518-529.
- Alexander D and Mills P (2013) *Small Group Teaching: A Toolkit for Learning Higher Education Academy: York*
- Alias, M. (2003). *Enhancing the Validity and Reliability of Classroom Test*. *Kertas Kerja Yang Dibentangkan Pada Seminar Pentaksiran Pendidikan Kebangsaan*. Kuala Lumpur, 5 – 8 Mei 2003.
- Aidan Mulkeen, 2010. *"Teachers in Anglophone Africa: Issues in Teacher Supply, Training, and Management," World Bank Publications, The World Bank, number 13545, June*
- Airasian, P. W., Madaus, G. F., & Rakow, E. A. (1971). *An Instructional Evaluation Monitoring System*. *Curriculum Theory Network*, 8/9, 74–95. <https://doi.org/10.2307/1179194>
- Airasian, P W. (1994): *Assessment in the Classroom McGraw-Hill, Inc., New York*
- Amos Iliya and Loko Grace Ifeoma, (2015) *Journal of Education and Practice* www.iiste.orgISSN 2222-1735 (Paper) ISSN 2222-288X (Online). Vol.6, No.22,
- Ammon, P., & Black, A. (1998). *Developmental psychology as a guide for teaching and teacher preparation*. In N. M. Lambert & B. L. McCombs (Eds.), *How students learn: Reforming schools through learner-centered education* (p. 409–448). American Psychological Association. <https://doi.org/10.1037/10258-015>
- Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers*. San Francisco: Jossey-Bass Publishers.

- Anderson, J. R., & Milson, R. (1989). *Human memory: An adaptive perspective. Psychological Review*, 96(4), 703–719. <https://doi.org/10.1037/0033-295X.96.4.703>
- Aoumeur, H. (2017). *The Impact of Class Size on Teaching and Learning English as a Foreign Language: The Case of the Department of English at Abdelhamid Ibn Badis University. Arab World English Journal*, 8(2).DOI: <https://dx.doi.org/10.24093/awej/vol8no2.25>
- Arias, J. J., & Walker, D. M. (2004). *Additional Evidence on the Relationship between Class Size and Student Performance. The Journal of Economic Education*, 35(4), 311–329. <http://www.jstor.org/stable/30042611>
- Argyle, M., & Furnham, A. (1983). *Sources of satisfaction and conflict in long-term relationships. Journal of Marriage and the Family*, 45, 481–493.
- Askew, M., Rhodes, V. Brown, M. William, D. Johnson, D. (1997). *Effective Teachers of Numeracy: Final report. King's college, London School of Education. ISBN 1871984637*
- Askew, G., Lodge, C. (2000). *Gifts, Ping-Pong and Loops-Linking Feedback and Learning. In Askew, S. (Ed.), Feedback for Learning (pp. 1018). London; Routledge Falmer.*
- Ayeleyemi, D. (2002). *Capacity Building in the Sciences: Imperative for Teacher Education in Nigeria, inaugural Lecture, University of Lagos.*
- Ball D. L. (1989). *Breaking with experience in learning to teach mathematics: The role of the pre service methods course. East Lansing: National Centre for Research on Teacher Learning, Michigan University.*
- Bandele, S.O. (1993). *Patterns of Relationship Between Internal and External Assessment of Secondary Schools, Subjects in Nigeria. Journal of Educational Leadership* 6(1), 50-54.
- Bandura, A., & Rosenthal, T. L. (1966). *Vicarious classical conditioning as a function of arousal level. Journal of Personality and Social Psychology*, 3, 54-62.
- Barksdale-Ladd MA, Thomas KF. *What's at Stake in High-Stakes Testing: Teachers and Parents Speak Out. Journal of Teacher Education*. 2000;51(5):384-397. doi:10.1177/0022487100051005006
- Beeson, R. O. (1973). *Immediate knowledge of results and test performance. The Journal of Educational Research*, 66(5), 224–226.
- Bell, B. & Cowie, B. (1997). *Formative assessment and science education: Research report of the Learning in Science Project (Assessment), pp. 340, August, 1997. Hamilton: University of Waikato.*
- Berliner, D. (2011) *Rational Responses to High Stakes Testing: the Case of Curriculum Narrowing and the Harm that Follows, Cambridge Journal of Education*, 41:3, 287-302, DOI: [10.1080/0305764X.2011.607151](https://doi.org/10.1080/0305764X.2011.607151)
- Bénabou, R. Tirole, J. (2002): *Self-Confidence and Personal Motivation, The Quarterly Journal of Economics, Volume 117, Issue 3, Pages 871–915, https://doi.org/10.1162/003355302760193913*
- Benevene P, De Stasio S and Fiorilli C (2020) Editorial: Well-Being of School Teachers in Their Work Environment. *Front. Psychol.* 11:1239. doi: 10.3389/fpsyg.2020.01239
- Bennell, P. and Akyeampong K. (2007) *Teacher Motivation in Sub-Saharan Africa and South Asia. Researching the Issues 71, Department for International Development: Education Papers.*

- Bennett (1996), 'Class size in primary schools: Perceptions of head teachers, chairs of governors, teachers and parents', *British Educational Research Journal*, 22: 1, p. 33
- Birney, RC. (1964): *The Effects of Grades on Students*. In *Journal of Higher Education*. DOI: 10.1080/00221546.1064.11774363
- Bitterman, M. E. (1969). Thorndike and the problem of animal intelligence. *American Psychologist*, 24(4), 444–453. <https://doi.org/10.1037/h0027942>
- Black, H. & Broadfoot, P. (1982). *Keeping Track of Teaching*. London: Routledge & Kegan Pau
- Black, A., & Ammon, P. (1992). A Developmental-Constructivist Approach to Teacher Education. *Journal of Teacher Education*, 43(5), 323–335. <https://doi.org/10.1177/0022487192043005002>
- Black, P, J.(1993)*Formative and Summative Assessment by Teachers*, *Studies in Science Education*,21:1,49-97,DOI: [10.1080/03057269308560014](https://doi.org/10.1080/03057269308560014)
- Black, P and William, D., (1998). *Assessment and Classroom Learning*, School of Education, King's College London, London, SE1 8WA, UK <http://dx.doi.org/10.1080/0969595980050102>.
- Black, P., Harrison, C., Lee, C., Marshall B., and William, D. (2004). *Working Inside the Black Box: Assessment for Learning in the Classroom*. *Phi. Delta Kappan*, 86 (1), 9-22. Doi:101177/003172170408600105.
- Blatchford, P., Moriarty, V., Edmonds, S., & Martin, C. (2002). *Relationships between class size and teaching: A multimethod analysis of English infant schools*. *American Educational Research Journal*, 39(1), 101–132. <https://doi.org/10.3102/00028312039001101>
- Bliss, Traci (1992). *Alternate certification in Connecticut: Reshaping the profession*. *Peabody Journal of Education*,67, No. 3.
- Block, J. & Anderson, L. (1975). *Mastery Learning in Classroom Instruction*. NY: Macmillan
- Blomeke, S. and Delaney, S. (2012). *Assessment of Teacher Knowledge Across Countries: A Review of the State of Research*. In *ZDM: the international journal on mathematics education* 44(3), DOI:[10.1007/s11858-012-0429-7](https://doi.org/10.1007/s11858-012-0429-7)
- Boe, E.E., & Shin, S. (2007). *Does Teacher Preparation Matter for Beginning Teachers in Either Special or General Education?* *The Journal of Special Education*, 41(3), 158–170.
- Broadfoot, Patricia M. (1996) *Education, Assessment and Society: a sociological analysis*, Buckingham UK, Open University Press.
- Brophy, J. (1981). *Teacher praise: A functional analysis*. *Review of Educational Research*, 51(1), 5–32. <https://doi.org/10.2307/1170249>
- Brown, J (2002): *training Needs Assessment A Must For Developing: A Must for Developing an Effective Training Program*. *Public Personnel Management*, 31, 569-578
- Çakmak, M. (2009). *The Perceptions of Student Teachers about the Effects of Class Size With Regard to Effective Teaching Process*. *The Qualitative Report*, 14(3), 395-408. <https://doi.org/10.46743/2160-3715/2009.1401>
- Cameroon (2020): *Gunmen Massacre School Children*. Retrieved from <https://www.hrw.org/news/2020/11/02/cameroon-gunmen-massacre-school-children>
- Cameroon (2018): *A Turn for the Worse: Violence and Human Rights Violations in Anglophone Cameroon* Scholarly project. Retrieved from <https://www.amnesty.org/en/documents/afr17/8481/2018/en/>

- Campbell DT, Standley JC (1963): *Experimental Quasi- experimental designs for Research*. Chicago: Rand McNally and Compa, Standley ny.
- Campbell, C. Evans, J. (2000). Investigation of pre-service teachers' classroom assessment practices during student teaching. In *The Journal of Educational Research*, 93 (2000), pp. 350-355
- Cardelle-Elawar M. (1993) *The Teacher as Researcher in the Classroom, Action in Teacher Education*, 15:1, 49-57, DOI: [10.1080/01626620.1993.10463153](https://doi.org/10.1080/01626620.1993.10463153)
- Carless, D. (2005). Prospects for the implementation of assessment for learning. *Assessment in Education*, 12 (1), 39–54.
- Carless, D., (2011). *From Testing to Productive Student Learning: Implementing Formative Assessment in Confucian-Heritage Settings*. Routledge. ISBN: 978-041580824.
- Care, E and Vista, A., (2017): *Education is Changing. It is Time Assessment Caught up*. *Stanford Social Innovation Review*
- Carroll, J. B. (1963). A model for school learning. *Teachers College Record*, 64, 723–733. [Google Scholar](https://scholar.google.com/)
- "Cerdan-Infantes, Pedro; Vermeersch, Christel. 2007. *More Time is Better : An Evaluation of the Full-time School Program in Uruguay*. Policy Research Working Paper; No. 4167. WorldBank, Washington, DC. ©WorldBank. <https://openknowledge.worldbank.org/handle/10986/7240> License: CC BY 3.0 IGO."
- Chapman, M. (2003). Incentives for Teachers: What Motivates, What Matters. *Educational Administration Quarterly*. Vol. 22, No. 3 (Summer 1986): 54-79.
- Chappuis, J. Stiggins, R, Chappuis, S. Arter, J. (2012): *Classroom Assessment for Student Learning: Doing it Right- Using it well*, 2nd Edition, Pearson.
- Chisholm L, Soudien C, Vally S, Gilmour D. (1999). Teachers and Structural Adjustment in South Africa. *Educational Policy*. 13(3):386-401. doi: [10.1177/0895904899013003003](https://doi.org/10.1177/0895904899013003003)
- CIDA (1996): *Capacity Development; The Concept and its Implementation in CIDA Context*. Hull: Policy Branch, CIDA
- Clarke, S. (1998): *The Role of Teachers in Teacher Assessment in England 1996-1998*. Citeseer
- Clement, D. A., & Frandsen, K. D. (1976). On conceptual and empirical treatments of feedback in human communication. *Communication Monographs*, 43(1), 11–28. <https://doi.org/10.1080/03637757609375911>
- Clotfelter, C.T., Ladd, H.F., & Vigdor, J.L. (2006). Teacher-Student Matching and the Assessment of Teacher Effectiveness. *The Journal of Human Resources*, 56(4), 78-820.
- Clotfelter, C; Ladd, H; Vigdor, J, (2007): *How and Why Do Teacher Credentials Matter for Student Achievement? ResearchGate*; DOI: 10.3386/W12828.
- Coleman, S. (1966). *Equality of Educational Opportunity (COLEMAN) Study (EEOS)*, Inter-university Consortium for Political and Social Research [distributor], 2007-04-27. <https://doi.org/10.3886/ICPSR06389.v3>
- Coleman J, S. (2006) *Equal educational opportunity. A definition in review of education Volume.1 Number.1*
- Collinson, V., Killeavy, M., & Stephenson, H. J. (1999). Exemplary Teachers: Practicing an Ethic of Care in England, Ireland and the United States. *Journal for a Just and Caring Education*, 5, 349-366.
- Colthan O. (2002). "Norms of Collegiality and Experimentation: Workplace Conditions of School Success." *American Educational Research Journal*. Vol. 19. No 3: 333.

- Cowie, B., and Bell, B. (1999): *A Model of Formative Assessment in Science Education*: <https://doi.org/10.1080/0989594-9993026>.
- Corcoran, TB, Goertz, ME *Instructional capacity and high performance schools* 1995 Unpublished manuscript, Consortium for Policy Research in Education, University of Pennsylvania, Philadelphia, PA.
[Google Scholar](#)
- Creswell, J.W. (2003). *Research design. Qualitative, quantitative and mixed methods approaches*. Thousand Oaks, CA: Sage
- Crisp, V. (2008) A review of literature regarding the validity of coursework and the rationale for its inclusion in the GCSE. *Research Matters*, 5, 20-24.
- Crooks, T. J. (1988). *The impact of classroom evaluation practices on students*. *Review of Educational Research*, 58(4), 438–481. <https://doi.org/10.2307/1170281>
- Darling-Hammond, Linda, Lisa Hudson, and Sheila Kirby (1989). *Redesigning Teacher Education: Opening the Door for New Recruits to Science and Mathematics Teaching*. Santa Monica: The RAND Corporation.
- Darling-Hammond, L. (1992). *Teaching and knowledge: Policy issues posed by alternative certification for teachers*. *Peabody Journal of Education*, 67, No. 3, pp. 123-154.
- Darling-Hammond, L. (1999). *Teaching quality and student achievement: A review of state policy evidence*. Seattle: Center for the Study of Teaching and Policy, University of Washington.
- Darling-Hammond, L. (1999a). *Solving the dilemmas of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child*. NY: National Commission on Teaching and America's Future.
- Darling-Hammond, L. (2000). *Teacher quality and student achievement: A review of the state policy evidence*. *Education Policy Analysis Archives*, 8(1), 1-44.
- Darling-Hammond, Linda. (2000). *How Teacher Education Matters*. *Journal of Teacher Education - J TEACH EDUC*. 51. 166173.10.1177/0022487100051003002.
- Darling-Hammond, L., Berry, B., & Thoreson, A. (2001). *Does teacher certification matter? Evaluating the evidence*. *Educational Evaluation and Policy Analysis*, 23(1), 57-77.
- Darling-Hammond, L. (2010). *Evaluating teacher effectiveness. How Teacher Performance Assessments Can Measure and Improve Teaching*. Center for American Progress. and student achievement. *Educational Evaluation and Policy Analysis*, 22 (2), 129–145
- Darling-Hammond, L. and Snyder, J. (in press). *Authentic assessment of teaching in context*. *Journal of Teaching and Teacher Education*.
- Dann, R., (2002): *Promoting Assessment as Learning. Improving the Learning Process*. Routledge, ISBN 97780415240079.
- Daniel, L.G., & King, D.A. (1998). *Knowledge and use of testing and measurement literacy of elementary and secondary teachers*. *Journal of Educational Research*, 91, 331–343.
- Darling-Hammond, L. (1992). *Teaching and knowledge: Policy issues posed by alternative certification for teachers*. *Peabody Journal of Education*, 67, No. 3, pp. 123-154.
- Darling-Hammond, L. (1999). *Teaching quality and student achievement: A review of state policy evidence*. Seattle: Center for the Study of Teaching and Policy, University of Washington.
- Darling-Hammond, L. (1999a). *Solving the dilemmas of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child*. NY: National Commission on Teaching and America's Future.

- Darling-Hammond, L. and Snyder, J. (2001). *Authentic assessment of teaching in context. Journal of Teaching and Teacher Education.*
- Darling-Hammond, Linda, Lisa Hudson, and Sheila Kirby (1989). *Redesigning Teacher Education: Opening the Door for New Recruits to Science and Mathematics Teaching.* Santa Monica: The RAND Corporation.
- Denton, J.J., and Peters, W.H. (1988). *Program assessment report: Curriculum evaluation of a non-traditional program for certifying teachers.* Texas A &M University, College Station, TX.
- Dewey, J. (1929). *The sources of a science of education.* New York: Horace Liveright.
- David Carless (2005) *Prospects for the implementation of assessment for learning, Assessment in Education: Principles, Policy & Practice, 12:1, 39-54, DOI: 10.1080/0969594042000333904*
- Duncan, C and Noonan, R (2007): *Factors Affecting Teachers' Grading and Assessment Practices, Vol. 53, Alberta Journal of Educational Research.*
- Dunchi, R.A. and Gitomer D. H. (1997): *strategies and challenges to changing the focus of Assessment and Instruction in science classrooms, Educational Assessment, 4:1, 37-73, DOI: 10.1207/s 15326977ea04012*
- Denton, J.J., and Peters, W.H. (1988). *Program assessment report: Curriculum evaluation of a non-traditional program for certifying teachers.* Texas A &M University, College Station, TX.
- Dewey, J. (1929). *The sources of a science of education.* New York: Horace Liveright.
- Dyal, A.B. (1993). *An exploratory study to determine principals' perceptions concerning the effectiveness of a fifth-year preparation program. Paper presented at the annual meeting of the Mid-South Educational Research Association, New Orleans, LA.*
- Denton, J.J., and Peters, W.H. (1988). *Program assessment report: Curriculum evaluation of a non-traditional program for certifying teachers.* Texas A &M University, College Station, TX.
- Dewey, J. (1929). *The sources of a science of education.* New York: Horace Liveright.
- Duncan, R. and Noonan, B. (2007). *Factors Affecting Teachers' Grading and Assessment Practices. The Alberta Journal of Educational Research Vol. 53, No. 1, Spring 2007, 1-21 C.*
- Dyal, A.B. (1993). *An exploratory study to determine principals' perceptions concerning the effectiveness of a fifth-year preparation program. Paper presented at the annual meeting of the Mid-South Educational Research Association, New Orleans, LA.*
- Dorr-Bremme, D. W. (1985). *Ethnographic Evaluation: A Theory and Method. Educational Evaluation and Policy Analysis, 7(1), 65–83. <https://doi.org/10.3102/01623737007001065>*
- Dowling, M. and Dauncey, E. (1984). *Teaching 3-9 Year Olds: Theory into Practice (WLE Professional Library) Paperback.*
- Dunchi, R, A. and Gitomer, D. H.(1997): *Strategies and Challenges to Changing the Focus of Assessment and Instruction in Science Classrooms, Educational Assessment, 4:1, 37-73, DOI: 10.1207/s15326977ea 04012*
- Dyal, A.B. (1993). *An exploratory study to determine principals' perceptions concerning the effectiveness of a fifth-year preparation program. Paper presented at the annual meeting of the Mid-South Educational Research Association, New Orleans, LA.*
- Earl, L. (2003). *Assessment as Learning: using Classroom Assessment to Maximise Student Learning.* Thousand Oaks, CA: Corwin Press.

- Ebel, R. (1982). *Proposed Solution to two Problems of Test Construction*. In *Journal of Educational Measurement*, Vol.19. No 4.
- Edmonds, R. (1979). *Effective Schools for the Urban Poor*. *Educational Leadership*, 37, 15-24.
- Edward J. Power (1996): *Educational Philosophy: A History from The Ancient World to Modern America*, New York: Garland Publishing, 1996. Pp xiv,242.
- Elango, S. & Jutti, R & Lee, L. (2005). *Portfolio as a learning tool: Students' perspective*. *Annals of the Academy of Medicine, Singapore*. 34. 511-4.
- Evertson, Carolyn, Willis Hawley, and Marilyn Zlotnick (1985). *Making a difference in educational quality through teacher education*. *Journal of Teacher Education*, 36 (3): 2-12.
- Ferguson, R. F. (1991): *Paying for Public Education: New Evidence on How and why Money Matters*. *Harvard Journal on Legislation*. Association of America and National Council of Teachers of Mathematics.
- Fennema, E., & Franke, M. L. (1992). *Teachers' knowledge and its impact*. In D. Grouws (Ed.), *Handbook of research on mathematics teaching and learning* (pp. 147-164). New York: Macmillan.
- Fetler, M. (1999). *High school staff characteristics and mathematics test results*. *Education Policy Analysis Archives*, 7 (March 24): <http://epaa.asu.edu>
- Ferguson, R.F. (1991, Summer). *Paying for public education: New evidence on how and why money matters*. *Harvard Journal on Legislation* 28(2), pp.465-498.
- Ferguson, P. and Womack, S.T. (1993): *The Impact of Subject Matter and Education Coursework on Teaching Performance*. *Journal of Teacher Education*, 44 (1): 55-63
- Finnnigan Y., and Gross K. (2007) *Teacher Job Satisfaction in Cyprus: The Results of a Mixed-Methods Approach*. *Journal of Economic Administration* 42, no. 3: 357-374.
- Fives, Helenrose & Barnes, Nicole. (2013). *Classroom Test Construction: The Power of a Table of Specifications*. *Practical Assessment, Research, & Evaluation*. 18. 1.
- Foncha, N. Teneng, A. Frinwie, N. (2020) "The Compulsory Sequential System of Assessment in Cameroon: Evidence of a Conceptual Misunderstanding" Published in *International Journal of Trend in Scientific Research and Development (ijtsrd)*, ISSN: 2456-6470, Volume-4 | Issue-3, pp.737-742.
- Fraser, B, J. Anderson, G, T. Walberg, H, J. (1982). *Assessment of Learning Environment: manual for Learning Environment Inventory (LEIO and my Class Inventory (MCI)*. ERIC
- Frey, B. (2018). *The SAGE encyclopedia of educational research, measurement, and evaluation (Vols. 1-4)*. Thousand Oaks,, CA: SAGE Publications, Inc. doi: 10.4135/9781506326139
- Freiberg, H. J. (2004). *Master Teacher Programs: Lessons from the Past*. *Educational Leadership*: 16-17.
- Friedrichsen P. J. et al. (2009). *Does Teaching Experience Matter? Examining Biology Teachers' Prior Knowledge for Teaching in an Alternative Certification Program*, *Journal of Research in Science Teaching*, 46 (4/2009), 357-383.
- Frith, & Macintosh, H. G. (1987). *A teacher's guide to assessment / D.S. Frith, H.G. Macintosh*. Stanley Thornes.
- Forness, S. R. (1973). *The reinforcement hierarchy*. *Psychology in the Schools*, 10(2), 168–177.[https://doi.org/10.1002/1520-6807\(197304\)10:2<168::AID-PITS2310100206>3.0.CO;2-L](https://doi.org/10.1002/1520-6807(197304)10:2<168::AID-PITS2310100206>3.0.CO;2-L)

- Fullan, M and Hargreaves, A, (1992): *Teacher Development and Educational Change*, Falmer Press.
- Fuller, E. J. (1999). *Does teacher certification matter? A comparison of TAAS performance in 1997 between schools with low and high percentages of certified teachers.* Austin: Charles A. Dana Center, University of Texas at Austin.
- Gage, N. L., & Berliner, D. C. (1992). (5th ed.). Houghton, Mifflin and Company.
- Gavin, B. (2002): *Teachers' Conceptions of Assessment: Implications for Policy and Professional Development.* In *Assessment in Education Principles Policy and Practice*. DOI: 10.1080/0969594042000304609. Grading and Marking (Students) – United States
- Gay, L., Mills, G. and Airasian, P. (2012) *Educational Research: Competencies for Analysis and Applications*. 10th Edition, Pearson, Toronto.
- Glass, C.R., Merluzzi, T.V., Biever, J.L. et al. (1982): *Cognitive assessment of social anxiety: Development and validation of a self-statement questionnaire.* *Cogn Ther Res*6, 37–55 (1982). <https://doi.org/10.1007/BF01185725>
- Gibbons, S. Kimmel, H. O'Shea, M. (2010): *Changing Teacher Behavior Through Staff Development: Implementing the Teaching and Content Standards in Science* <https://doi.org/10.1111/j.1949-8594.1997.tb17279>
- Ginsburg, S.E. (2009). *Improving schools through teacher development: Case studies of the Aga Khan Foundation Projects in East Africa.* Routledge
- Gipps, C. *The social implications of national assessment.* *Urban Rev* 22, 145–159 (1990). <https://doi.org/10.1007/BF01108249>
- Gipps, C. V. (1992). *National Curriculum Assessment: A Research Agenda.* *British Educational Research Journal*, 18(3), 277–286. <http://www.jstor.org/stable/1500832>
- Gipps, C., McCallum, B., Hargreaves, E., Pickering, A., (2000). *From 'TA' to Assessment for Learning: The Impact of Assessment Policy on Teachers' Assessment Practices, A paper Presented at the British Educational Research Association Annual Conference, University of Glamorgan.*
- Goodson, I. F. (2001). "Social Histories of Educational Change." *Journal of Educational Change* 2 (1): 4563. doi:10.1023/A:1011508128957.
- Gore, J.M., Griffiths, T., & Ladwig, J.G. (2004). *Towards better teaching: productive pedagogy as a framework for teacher education.* *Teaching and Teacher Education*, 20:375-387.
- Gravetter F. J and Wallnau, B.L. (2017). *Statistics for the Behavioral Sciences*, 10th Edition, Lynn Lustberg, MPs Ltd. ISBN: 978.1-305-86280-7
- Gray, R., (2002): *Assessing Students' Written Projects in New Directions for Teaching and Learning*, Volume 2002, Issue 91, pp. 37-42. <https://doi.org/10.1002/ti.64>
- Grave J.M, Klaassen T, Vereijken M, Van Kuppeveld, Bolhuis S. & Vorstenbosch M. (2011) *Collaborative group work: Effects of group size and assignment structure on learning gain, student satisfaction and perceived participation, Medical Teacher*, 33:12, 983-988, DOI: [10.3109/0142159X.2011.588733](https://doi.org/10.3109/0142159X.2011.588733)
- Gronlund, N.E. and Waugh, C. K. (2009). *Assessment of Student Achievement.* Upper Saddle River, NJ: Pearson Education.
- Haladyna, T. Downing, S & Rodriguez, M. (2002). *A Review of Multiple-Choice Item-Writing Guidelines for Classroom Assessment, Applied Measurement in Education*, 15:3, 309-333, DOI: [10.1207/S15324818AME1503_5](https://doi.org/10.1207/S15324818AME1503_5)
- Haley, M.A. (1904). "Why teachers should organize," *Journal of Education*, vol. 60, no. 13, pp. 215–222, View at: [Publisher Site](#) / [Google Scholar](#)

- Hassanain, M. A. and I. Ali, (2005). "Framework model for post-occupancy evaluation of school facilities," *Structural Survey*, vol. 29, View at: [Publisher Site](#) / [Google Scholar](#)
- Hargreaves, A., (2001). *Emotional Geographies of Teaching: Journal of Teachers College Record*, Volume 103, Issue 6, pp. 1056-1080.
- Hargreaves, A., Earl, L., Schmidt, M., (2002): *Perspectives on Alternative Assessment Reform, In American Educational Research Journal*, vol.39
- Hargreaves, E. (2005). *Assessment for Learning? Thinking Outside the (black) Box*, *Cambridge Journal of Education*, 35:2, 213-224, Doi:10.1080/03057640500146880.
- Hargreaves, A., (2015). *Educational Change takes ages: Life, Career and Generational Factors in Teachers' Emotional Responses to Educational Change. Teaching and Teacher Education* 21 (8) 967-983.
- Harlen, W. and James, M., (1997), *Assessment and Learning: Differences and Relationships between Formative and Summative Assessment, Assessment in Education: Principles, Policy & Practice*, 4(3): pp. 365-379.
- Hattie J, and Timperley H. (2007): *The Power of Feedback. Review of Educational Research*. 77(1):81-112. doi:[10.3102/003465430298487](https://doi.org/10.3102/003465430298487)
- Hattie, J. A. C. (2009). *Visible Learning A synthesis of over 800 meta-analyses relating to achievement*. Greenwich, CN: Information Age Publishing
- Henry, G.T., Bastian, K.C. and Fortner, C.K. (2011). "Stayers and leavers: early-career teacher effectiveness and attrition", *Educational Researcher*, Vol. 40 No. 6, pp. 271-280 doi: [10.3102/0013189X11419042](https://doi.org/10.3102/0013189X11419042).
- Hill, H. C., Ball, D. L., Schilling, S. G. (2008). *Unpacking pedagogical content knowledge: Conceptualizing and measuring teachers' topic-specific knowledge of students. Journal for Research in Mathematics Education*, 39, 372-400. [Google Scholar](#) / [ISI](#)
- HMI (1990): *Standards in Education: DES*
- Hoge, R.D., & Coladarci, T. (1989). *Teacher-based judgments of academic achievement: A review of literature. Review of Educational Research*, 59, 297-313.
- Hopkins, D. and Stanley, (1981). *Educational and Psychological Measurement and Evaluation*. 0132362732, 9780132362733, Prentice-Hall.
- Ingenkamp, K. (1986): *The possible effects of various reporting methods of learning outcomes, Studies in Educational Evaluation*, Volume 12, Issue 3, Pp 341-350, ISSN 0191-491X, [https://doi.org/10.1016/0191-491X\(86\)90053-2](https://doi.org/10.1016/0191-491X(86)90053-2).
- Jencks, C.S. (1972). *The Coleman Report and the conventional wisdom. In F. Mosteller & D.P. Moynihan (Eds.), On equality of educational opportunity. New York: Random House.*
- Jencks, C.S., Smith, M., Acland, H., Bane, M.J., Cohen, D., Gintis, H., Heyns, B., & Michelson, S. (1972). *Inequality: A reassessment of the effect of family and schooling in America. New York: Basic Books.*
- Johnson, S.M., M. A. Kraft, and J. P. Papay, (2012): "How context matters in high-need schools: the effects of teachers' working conditions on their professional satisfaction and their students' achievement," *Teachers College Record*, vol. 114, no. 10, pp. 1-39, View at: [Google Scholar](#)
- Jones, R. L. & Bray, E. (1986). *Assessment: From Principles to Action*, Macmillan Education Ltd

- Kalleberg, Arne & Marsden, Peter & Aldrich, Howard & Cassell, James. (1990). *Comparing Organizational Sampling Frames*. *Administrative Science Quarterly*, 35. 10.2307/2393513.
- Karraker, R. J. (1967). *Knowledge of results and incorrect recall of plausible multiple-choice alternatives*. *Journal of Educational Psychology*, 58(1), 11–14. <https://doi.org/10.1037/h0024113>
- Karweit, Nancy. (1983): *Time-on-Task: A Research Review*. Baltimore, Md.: The Johns Hopkins University, Center for Social Organization of Schools. [Google Scholar](#)
- Keith M Lewin and Janet S Stuart (2003). *Researching teacher education: new perspectives on practice, performance and policy multi-site teacher education research project (MUSTER)*
- Kilpatrick, J., Swafford, J., & Findell, B. (Eds.). (2001). *Adding it up: Helping children learn mathematics*. Washington, DC: National Academies Press.
- Kleickmann T, Richter D, Kunter M, Elsner J, Besser M, Krauss S and Baumert J (2012). *Teachers' Content Knowledge and Pedagogical Content Knowledge: The Role of Structural Differences in Teacher Education*. published online 23 October 2012. In *Journal of Teacher Education*. DOI: 10.1177/0022487112460398
- Kluger, A. N., & DeNisi, A. (1996). *The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory*. *Psychological Bulletin*, 119(2), 254–284. <https://doi.org/10.1037/0033-2909.119.2.254>
- Kohlberg, L., & Kramer, R. (1969). *Continuities and discontinuities in childhood and adult moral development*. *Human Development*, 12(2), 3–120. <https://doi.org/10.1159/000270857>
- König, J., Blömeke, S., Paine, L., Schmidt, B., & Hsieh, F.-J. (2011). *General pedagogical knowledge of future middle school teachers. On the complex ecology of teacher education in the United States, Germany, and Taiwan*. *Journal of Teacher Education*, 62, 188–201.
- Kola, Aina & Sunday, Olanipekun. (2015). *A Review of Teachers' Qualifications and Its Implication on Students' Academic Achievement in Nigerian Schools*.
- Kraft, M.A. and Papay, J.P. (2015). *Do Supportive Professional Environments promote Teacher Development? Explaining Heterogeneity in returns to Teaching Experience*. *Educational Evaluation and Policy Analysis* 36 (4) Doi: 10.3102/0162373713519496
- Krampen, G. (1987). *Differential effects of teacher comments*. *Journal of Educational Psychology*, 79(2), 137–146. <https://doi.org/10.1037/0022-0663.79.2.137>
- Krauss, S. Brunner, M. Kunter, M. J. (2008). *Pedagogical Content Knowledge and Content Knowledge of Secondary Mathematics Teachers*. In *Journal of Educational Psychology* 100(3):716-725. DOI:10.1037/0022-0663.100.3.716
- Krejcie, R.V., & Morgan, D.W., (1970). *Determining Sample Size for Research Activities*. *Educational and Psychological Measurement*
- Kulhavy, R. W. (1977). *Feedback in Written Instruction*. *Review of Educational Research*, 47(2), 211–232. <https://doi.org/10.3102/00346543047002211>
- Lawshe, C. H. (1975). *A quantitative approach to content validity*. *Personnel Psychology*, 28(4), 563–575. <https://doi.org/10.1111/j.1744-6570.1975.tb01393.x>

- Leauby, B A.; Atkinson, M. (1989): *The Effects of Written Comments on Student Performance. Journal of Education for Business*, v64 n6 p271-74.
- Lemlech, J. K. (1984). *Oral Language Development Through the Integration of Language Arts and Social Studies. Teacher Education Quarterly*, 11(3), 62–72. <http://www.jstor.org/stable/24673690>
- Lewin, K. M., & Stuart, J. M. (2003). *Insights into the Policy and Practice of Teacher Education in Low-Income Countries: The Multi-Site Teacher Education Research Project. British Education*, 29, 691-707. <https://doi.org/10.1080/0141192032000s133703>
- Lezotte, L (1989) *School improvement based on the effective schools research, International Journal of Educational Research*, 13, (7): 815-825
- Lindelow, J., Mazzarella, J. A., Scott, J. J., Ellis, T.I., & Smith, S. C. (1989). *School climate. In S.C. Smith, & P. K. Piele (Eds.), School leadership: Handbook for excellence (pp. 168 188). Washington, DC: Office of Educational Research and Improvement*
- Lindgren, H. C. (1967). *Brainstorming and the Facilitation of Creativity Expressed in Drawing. Perceptual and Motor Skills*, 24(2), 350–350. <https://doi.org/10.2466/pms.1967.24.2.350>
- Leinhardt, G., & Smith, D. A. (1985). *Expertise in mathematics instruction: Subject matter knowledge. Journal of educational psychology*, 77(3), 247.
- Linn, R. & Miller, M. (2005). *Measurement and Assessment in Teaching (9th Ed.)*. Upper Saddle River NJ: Merrill-Prentice Hall.
- Locke, E. A. (1966). *Relationship of Task Success to Satisfaction: Further Replication. Psychological Reports*, 19(3_suppl), 1132–1132. <https://doi.org/10.2466/pr0.1966.19.3f.1132>
- Lorsbach, A, Tobin, k, Briscoe, Cs and Lamasters (1992). *An interpretation of Assessment methods in middle school science, In international Journal of science Educational* 14 (3), 305-317.
- MacMillan, J. H., & Nash, S. (2000). *Teacher classroom assessment and grading practices decision making. Paper presented at the annual meeting of the National Council on Measurement in Education, New Orleans, LA.*
- McMillan, James & Myran, Steve & Workman, Daryl. (2002). *Elementary Teachers' Classroom Assessment and Grading Practices. Journal of Educational Research - J EDUC RES.* 95. 203-213. [10.1080/00220670209596593](https://doi.org/10.1080/00220670209596593).
- Marcus, C. & Wilson, D. L. (2000). *Brain SMART 60 strategies for boosting test scores (Fischler School of Education at Nova Southeastern University Series). Orlando, FL: Brain SMART.*
- Marcus, Abiye. (2014). *Science Teachers' and Continuous Assessment Implementation in Secondary Schools: Competence and Effects. IOSR Journal of Research & Method in Education (IOSRJME).* 4. 36-41. [10.9790/7388-04453641](https://doi.org/10.9790/7388-04453641).
- Marinette, B. (2018). *The Impact of Working Conditions on Teachers Attrition. International Journal of Construction Education and Research.* Vol.5. 59-
- Martin, T. Peter S.; Gibbons, M; Limoges, C.; Simon Schwartzman.; Nowotny H, (1995)*The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*, SAGE, DOI: [10.2307/2076669](https://doi.org/10.2307/2076669)
- Marzano, R. J. (2006). *Classroom assessment and grading that work.* Alexandria, VA: Association for Supervision and Curriculum Development.
- Marzano, R. J. (2013). *Teacher Evaluation Model. The Marzano Research Laboratory.* marzanoresearch.com 888.849.0851
- Maslow, A. H. (1943). *A theory of human motivation. Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>

- McMillan, J. (2008). *Educational Research. Fundamentals of the Consumer (5th ed.)*. Virginia Commonwealth University. NY: Pearson Education Inc.
- Mc Namara, M. (2010). *Exploring the Impact of Standardised Assessment in the Primary School Classroom Michael Mc Namara B.Ed., PDPEs*. Thesis submitted to the National University of Ireland
- Mertler, C.A., (2003). *Classroom Assessment: A Practical Guide for Educators*. Edition on Amazon.com
- MoE (2007). *Ethiopian Teacher's Development Programme Guideline*. Ministry of Education, Ethiopia, Directorate Addis Ababa.
- Morgan, C., and Watson,A.,(2002): *The Interpretative Nature of Teacher's Assessment of Students*, In *Journal For Research in Mathematics Education*, Vol. Pp 78-110
- Moos, R. H. (1979). *Evaluating Educational Environments: Procedures, Measures, Findings and Policy Implications*. San Francisco, CA: Jossey-Bass.
- Mick Healey & Alan Jenkins (2000). *Kolb's Experiential Learning Theory and Its Application in Geography in Higher Education*, *Journal of Geography*, 99:5, 185-195, DOI:10.1080/00221340008978967.
- Michaelowa, Katharina (2002): *Teacher Job Satisfaction, Student Achievement, and the Cost of Primary Education in Francophone Sub-Saharan Africa*, HWWA Discussion Paper No. 188, Hamburg Institute of International Economics (HWWA), Hamburg
- Mulkeen, Aidan. 2010. *Teachers in Anglophone Africa: Issues in Teacher Supply, Training, and Management*. Development Practice in Education. Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/13545> License: CC BY 3.0 IGO. <http://hdl.handle.net/10986/13545>
- Mulryan-Kyne, C. (2010). *Teaching large classes at college and university level: Challenges and opportunities*. *Teaching in Higher Education*, 15(2), 175–185. <https://doi.org/10.1080/13562511003620001>
- Murnane, R. and Phillips, B. (1981): *Learning by Doing, Vintage, and Selection: Three Pieces of the Puzzle Relating Teaching Experience and Teaching Performance*. *Economics of Education Review*, 1981, vol. 1, issue 4, 453-465
- Murphy P.D., and Harrold, R.L. (1997). *Assessment: A Moving Target with Rising Expectations*. A Paper Presented at the Annual Meeting of the North Central Association, Chicago
- Mutuku, E. (2008): *Understanding the Differences in Marking Performance of JSC Mathematics Markers in Namibia: A Case Study*, University of Rhodes
- Nadas, R & Suto, I (2008) *An exploration of self-confidence and insight into marking accuracy among GCSE maths and physics markers*. *Research Matters*, 5, 9-15.
- Ndongko, T. M., & Tambo, L. I. (2000). *Educational development in Cameroon 1961- 1999 issues and perspectives*. United State of America: Modison Wisdom Publishers Ltd.
- Neil, M. (2019). *Language and the Joint Creation of Knowledge: The Selected Works of Neil Mercer*. 10.4324/9780429400759.
- Njabili, A. F (1993) *Practical guide for classroom measurement and testing: The basic essentials*. Dar es Salaam: Mture.
- Nitko, Anthony. (2001). *Educational Assessment of Students. Third Edition*. OECD (2009): *Education at a Glance Indicators*. Available at www.oecd.org/edu/eag2009

- OECD (2003) *Definitions on class size*: <http://stats.oecd.org/glossary/detail.asp?ID=5347>
- OECD (2005). *Education at a Glance 2005*. OECD
- OECD (2014). "Indicator D6: What does it take to become a teacher?", in *Education at a Glance: OECD Indicators*, OECD Publishing. <http://dx.doi.org/10.1787/888933120252>
- Obiageli, Uyanne & Lasbat, Omoshalewa & Abdulrasaq Olatunji, Balogun. (2020). Influence of motivation on teachers' effectiveness in Ilorin West local government, Kwara State. *Journal of Education and Learning (EduLearn)*. 14. 345. [10.11591/edulearn.v14i3.16214](https://doi.org/10.11591/edulearn.v14i3.16214).
- Odden A, R., Carolyn K. (1999): *Paying Teachers for What They Know and Do: New and Smarter Compensation Strategies to Improve Schools*. Corwin Press
- Ohlsen, M.T., (2007). *Classroom Assessment Practices of Secondary School Members of NCTM*, McMillan.
- Osei-Owusu, B. Ampoto, E. Ampomah, R. Akyina, K. Osei-Owusu, E. (2018). *Misuse of Instructional Time and Its Effect on Students' Academic Achievement in Four Public Senior High Schools in the Ashanti Mampong Municipality of Ghana*. In *International Journal of Innovative Research & Development*. Vol 7, Issue 3. DOI No: [10.24940/ijird/2018/v7/i3/MAR18038](https://doi.org/10.24940/ijird/2018/v7/i3/MAR18038)
- Palys, T., & Atchison, C. (2014). *Research decisions: Quantitative, qualitative, and mixed methods approaches (5th ed.)*. Toronto, Canada: Nelson Education.
- Page, E. B. (1958). *Teacher comments and student performance: A seventy-four classroom experiment in school motivation*. *Journal of Educational Psychology*, 49(4), 173–181. <https://doi.org/10.1037/h0041940>
- Peace, W. J. (1993). *LESLIE WHITE AND EVOLUTIONARY THEORY*. *Dialectical Anthropology*, 18(2), 123–151. <http://www.jstor.org/stable/29790533>
- Pollard, A. Croll, P., Abbott, D., Broadfoot, P. & Osborn, M.. (1994). *Teachers and Education Policy: Roles and Models*. *British Journal of Educational Studies*, 42(4), 333–347. <https://doi.org/10.2307/3121675>
- Popham, W. J. (2001a). *Teaching to the test?* *Educational Leadership*, 58(6).
- Popham, W. J. (2001b). *The truth about testing: An educator's call to action*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Popham, W.J. (2008). *Transformative Assessment*. [educ.info](http://www.education.com/info)
- PISA (2006). *Science Competencies for Tomorrow's World: Volume 1: Analysis*
- Radecki, P M., Swales, J M. (1988). "ESL student reaction to written comments on their written work." *System* 16(3): 355-365. <<http://hdl.handle.net/2027.42/27547>>
- Ramaprasad, A. (1983) *On the definition of feedback*, *Behavioral Science*, 28, pp. 4-13
- Rayment, T. (2006): *99 Classroom Calamities... and How to Avoid Them*. Amazon.com.
- Reeve, J., & Su, Y.-L. (2014). *Teacher motivation*. In M. Gagné (Ed.), *The Oxford handbook of work engagement, motivation, and self-determination theory* (pp. 349–362). Oxford University Press.
- Reid, R., DuPaul, G.J., Power, T.J., Anastopoulos, A.D., Rogers-Atkinson, D., Noll, M.B., & Riccio, C. (1998). *Assessing culturally different students for AD/HD using behavior rating scales*. *Journal of Abnormal Child Psychology*, 26, 187-198.
- Resnick, D. P. 1982. *History of educational testing*. In *Ability testing: Uses, consequences, and controversies. Part II: Documentation section*, ed. A. K. Wigdor and W. R. Garner, 173–94. Washington, DC: National Academy Press. [Google Scholar](https://scholar.google.com/citations?user=...)

- Reynolds, R. Livingston, R. Willson, T. (2009): *Measurement and Assessment in Education, 2nd Edition*. Texas A&M University, Texas A&M University. <https://www.pearson.com>. ISBN-13: 9780137149094
- Rice, J.K.(2010).*The Impact of Teacher Experience: Examining the Evidence and Policy Implications*, CALDER,BRIEF,11
- Rivers, J and Sanders,W. (2002). *Teacher Quality and Equity in Educational Opportunity. Findings and Policy Implications*, ResearchGate
- Roberts, T. B. (1985). *States of Consciousness: A New POTPOURRI Intellectual Direction, a New Teacher Education Direction* Thomas B. Roberts. *Journal of Teacher Education*, 36(2), 55–59. <https://doi.org/10.1177/002248718503600212>
- Robert Glass (2000). *Cognition and Institution: Mind, Development and Community*, *Journal of Applied Developmental Psychology*, Volume 21, Issue 1, 2000, Pp 123-127, ISSN 0193-3973, [https://doi.org/10.1016/so193-3972\(99\)00056-8](https://doi.org/10.1016/so193-3972(99)00056-8).
- Ronald, E. G., Brewer, D. J., Gamoran, A., & Willms, J. D. (2001). *Class Size and Student Achievement. Psychological Science in the Public Interest*, 2(1), 1–30. <https://doi.org/10.1111/1529-1006.003>
- Rowntree, D. (1977). *Assessing Students: How Shall We Know Them?*
- Rudman, H. C. (1987): *Testing and Teaching; Two sides of the coin? In studies in educational Evaluation*, volume 13, issue 1, Pp73-90 <https://doi.org/10.10/6/5019/-491x> (87) 80022-6
- Sadler, D. R., 1989. *Formative Assessment and the Design of Instructional Systems*. *Instr Sci* 18, 119-144 <https://doi.org/10.1007/BF00117714>.
- Sambandam, Elango & Jutti, R & Lee, L. (2005). *Portfolio as a learning tool: Students' perspective*. *Annals of the Academy of Medicine, Singapore*. 34. 511-4.
- Satterly, D. (1989). *Assessment in Schools*. Oxford: Basil Blackwell Ltd.
http://www.foundationcoalition.org/home/keycomponents/assessment_evaluation.html
- Scheerens, Jaap. (2005). *The School Effectiveness Knowledge Base as a Guide for School Improvement*. 10.1007/1-4020-4452-6_4.
- Scheerens, (2015). *Theories on Educational Effectiveness and Ineffectiveness*. *School Effectiveness and School Improvement*. 26. 10.1080/09243453.2013.858754.
- Scouller, K. M. (1998): *The influence of assessment method on students' learning approaches: Multiple choice question examination versus assignment essay: Higher Education*, 35, 453-472.
URL: <https://link.springer.com/article/10.1023/A:1003196224280>
- Shepard, L. A. (2000). *The Role of Assessment in a Learning Culture*. *Educational Researcher*, 29(7), 4–14. <https://doi.org/10.3102/0013189X029007004>
- Shipman,N J. (1983): *Effective Time-Management Techniques for School Administrators*. Amazon.com
- Schunk, D. H. (1984). *Self-efficacy perspective on achievement behavior*. *Educational Psychologist*, 19(1), 48–58. <https://doi.org/10.1080/00461528409529281>
- Schultz, C. B., & Sherman, R. H. (1976). *Social Class, Development, and Differences in Reinforcer Effectiveness*. *Review of Educational Research*, 46(1), 25–59. <https://doi.org/10.3102/00346543046001025>
- Scriven, (1967):*The Methodology of Evaluation*. In Tyler R.M., Gagne, R.M. and Scriven, M. (Eds.) *Perspectives of Curriculum Evaluation* (Vol. 1, pp. 39-83). Chicago, IL: Rand MC Nally
- Senk, S, Beckmann, C., and Thompson, D., (1997): *Assessment and Grading in High School Mathematics*. In *Journal for Research in Mathematics Education*, Vol 28, No 2, 187-215.

- Skinner, B. F. (1969). *Contingencies of reinforcement*. Appleton-Century-Crofts.
- Slavin, R. E. (1984). *Meta-Analysis in Education: How Has It Been Used?* *Educational Researcher*, 13(8), 6–15. <https://doi.org/10.3102/0013189X013008006>
- Slavin, R.E., & Karweit, N.L. (1985). *Effects of whole-class, ability grouped, and individualized instruction on mathematics achievement*. *American Educational Research Journal*, 22, 351–367. [Google Scholar](#) | [SAGE Journals](#) | [ISI](#)
- Shalem, Y. (2014). *What Binds Professional Judgement?* In M. Young and J. Muller (Eds). *Knowledge, Expertise and the Professions*. London: Routledge
- Shipman, P. (1986). *Scavenging or Hunting in Early Hominids: Theoretical Framework and Tests*. *American Anthropologist*, 88(1), 27–43. <http://www.jstor.org/stable/679277>
- Shulman, L.S. (1986). *Paradigms and research programs for the study of teaching*. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed.). New York: Macmillan. Wheelwright, P. (Ed.).
- Shulman, L.S. (1987). *Paradigms and research programs for the study of teaching*. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed.). New York: Macmillan.
- Shulman, L. S. (1988) *The dangers of dichotomous thinking in education*. In P. Grimmer and G. Erickson (Eds.) *Reflection in teacher education*. New York, NY: Teachers College Press.
- Smith, K. (2003). *Reconsidering Reliability in Classroom Assessment and Grading*. In *Educational Management Issues and Practice*. <https://doi.org/10.1111/j.1745-3992.2003.tb00141>.
- Stiggins, R. J., Frisbie, R. J., & Griswold, P. A. (1989). *Inside high school grading practices: Building a research agenda*. *Educational Measurement: Issues and Practice* 8(2), 5–14.
- Stiggins, R.T., and Conkin, N.F. (1992). *Educational Test and Measurements*, New York Press, United States.
- Stiggins, R.J., and Conklin N,F,. (1992); *In teachers' hands; investigating the practices of classroom Assessment; available at <https://books.google>*. Cm/books.
- Stiggins, R,J., and Conklin, N,F (1992): *Educational test and measurements, New York preps united states. (Students) (1912) Grading and making united states*.
- Stiggins, R. J.(1994). *Student- Centered Classroom Assessment*.Merril
- Stiggins, R,J, (2002): *Assessment crisis: The Absence of Assessment for learning*. *Phi Delta kappan*. Pp 758-765.Doi: 10.1177/oo3172170208301010
- Stiggins, R.J., Arter, J. A., Chappius, J., Chappuis, S. (2012). *Classroom Assessment for Student Learning: Doing it Right-Using it well*. Pearson, 2nd Edition.
- Stringfield, S and Teddlie, C (1991). *School, Classroom and Student Level Indicators of Rural School Effectiveness*. *Journal of Research in Rural Education*, academia.edu
- Stoecker, J. L., Pascarella, E. T., and Wolfe, L. (1988). *Persistence in Higher Education: A 9-Year Test of a Theoretical Model*. *Journal of College Student Development*, 29(3): 196-209.
- Simonds SK. *Health Education as Social Policy*. *Health Education Monographs*. 1974;2(1_suppl):1-10. doi:10.1177/10901981740020S102
- Singh, Renu (2021): *Teachers' working conditions in state and non-state school*. [Global Education Monitoring Report Team](#)
- Suto, I., Crisp, V. and Greatorex, J. (2008). *Investigating the judgemental marking process: an overview of our recent research*. *Research Matters: A Cambridge Assessment publication*, 5, 6-9.

- Suzieleez, S., and Chapman, A., (2009). *Classroom Assessment: Juxtaposing Teachers' Beliefs with Classroom Practices*.
- Tamakloe, E.K., Amadahe, F.K. & Atta, E.T. (2005). *Principles and Methods of Teaching*, Accra: Ghana University Press.
- Taras, M. (2005). *Assessment Summative and Formative Some Theoretical Reflections*. In <https://doi.org/10.1111/j.1467-8527.2005.00307.X>.
- Taft SH, Perkowski T, Martin LS. (2011): *A framework for evaluating class size in online education*. *Quarterly Review of Distance Education*. 12(3):181-97.
- Tambo, L. (1995). *Models and Practice in Initial Secondary Teacher Education in Cameroon*. *Teacher Education Quarterly*, 22(1), 59–67. <http://www.jstor.org/stable/23477820>
- Taylor, F. K. (1964). *Book Reviews : MEASURING HUMAN MOTIVATION*. Edited by Robert C. Birney and Richard C. Teevan. London: D. Van Nostrand Co. Ltd., 1962. Pp. 182. Price, 12/-. *International Journal of Social Psychiatry*, 10(2), 150–150. <https://doi.org/10.1177/002076406401000208>
- Taylor, C. S. (1997). *Using portfolios to teach teachers about assessment: How to survive*. *Educational Assessment*, 4(2), 123–147.
- Tchombe, T (2010): *Handbook of African Educational Theories and Practices - Human trends and practices – implications for teacher education; Dropouts'* <http://www.thehdr.org> > ..
- TIMSS (2003). *Trends in International Mathematics and Science Study*
- Timperley, H. et al. 2007. *Teacher Professional Learning and Development: Best Evidence Synthesis Iteration [BES]*. Wellington, New Zealand: Ministry of Education. Available at www.educationcounts.govt.nz/goto/BES
- Topping, K. (1998). *Peer Assessment Between Students in Colleges and Universities*. *Review Educational Research*, 68(3), 249-276. <https://doi.org/10.3102/00346543068003249>
- Torrance, H., and Pryor, J. (2001). *Developing Formative Assessment in the Classroom: Using Action Research to Explore and Modify Theory*. *British Educational Research Journal*, 27 (5), 615-631. Retrieved April 12, 2011, from <http://www.jstor.org/stable/1501956>.
- Torrance, H., and Pryor, J. (1995). *Investigating Formative Assessment: Teaching, Learning and Assessment in the Classroom*, Open University Press.
- Trotter, E. (2006). *Student Perceptions of Continuous Summative Assessment*, *Assessment and Evaluation in Higher Education*, 31:5, 505-521, doi:10.1080/02602930600679506.
- Tudor-Craig, M. (2002) *Teacher talking time: A policy research report on Malawian teachers' attitudes to their own profession*. *Valuing Teachers*, VSO.
- Tyler, R. W. (1958). *Curriculum Organization*. *Teachers College Record*, 59(11), 105–125. <https://doi.org/10.1177/016146815805901106>
- Ukeje, B.O. (1991). *The Education of Teachers for a New School Order*. *The Nigerian Teacher*, 1 (i) 4-12
- UNICEF. (2019). *Geneva Palais briefing note on the situation for children in the North-West and South West regions of Cameroon [Press release]*. Retrieved from <https://www.unicef.org/press-releases/genevapalais-briefing-note-situation-children-north-west-and-south-west-regions>
- Vandeyar S & Killen R 2003. *Has curriculum reform in South Africa really changed assessment practices, and what promise does the revised National Curriculum Statement hold? Perspectives in Education*, 21:119-134.
- Verloop, N. Jan Van Driel. Paulien C. Meijer (2001). *Teacher knowledge and the knowledge*

- base of teaching. In *International Journal of Educational Research* 35(5):441-461. DOI:10.1016/S0883-0355(02)00003-4
- Voss, T. Kunter, M Jürgen Baumert, J. (2011), Assessing Teacher Candidates' General Pedagogical/Psychological Knowledge: Test Construction and Validation. In *Journal of Educational Psychology* 103(4). DOI:10.1037/a0025125
- Vygotsky (1986). In Kozulin, A. (2004). *Vygotsky's Theory in the Classroom: Introduction European Journal of Psychology of Education*, 19 (1), 3-7, Retrieved April 12, 2021, from <http://www.jstor.org/stable/2342139725>
- Watkins, C., Carnell, E. and Lodge, Wagner, Patsy and Whallens, Carolone (2002). *Effective Learning (Research Matters Series No. 17)*. London: Institute of Education School Improvement Network.
- Waldrip, B. Fisher, L. Dorman, J. (2009): *Identifying exemplary science teachers through their students' perceptions of the assessment process* <https://doi.org/10.1080/02635140802658958>
- Walshaw, M., (2012). *Teacher knowledge as fundamental to effective teaching practice*. In *Journal of Mathematics Teacher Education* 15(3). DOI: [10.1007/s10857-012-9217-0](https://doi.org/10.1007/s10857-012-9217-0).
- Walvoord, B.E. and Anderson, V.J., (2010). *Effective Grading: A Tool for Learning and Assessment*. San Francisco: Jossey – Bass
- Webb, C. (1992). *The use of the first person in academic writing: objectivity, language and gatekeeping*. *Journal of advanced nursing*, 17 6, 747-52.
- Wiggins G.J. and MCT, ghe, H. (2015): *Three Lessons for Teachers from Grand Wiggins*, In ASCD Conference on Educational Leadership.
- Worrall D.J and Butler R. J. (1983): *Workers' Compensation: Benefit and Injury Claims Rates in the Seventies*. *The Review of Economics and Statistics* Vol. 65, No. 4, The MIT Press pp. 580-589 (10 pages). <https://doi.org/10.2307/1935926>.
<https://www.jstor.org/stable/193592>
- Wohlfahrt, Melanie. (2018). *Primary Teacher Education in Rural Cameroon: Can Informal Learning Compensate for the Deficiencies in Formal Training?*. *Africa Education Review*. 15. 1-20. [10.1080/18146627.2016.1224586](https://doi.org/10.1080/18146627.2016.1224586).
- Weeden, P. and Lambert, D. (2006). *Geography inside the Black Box: Assessment for Learning in the Geography Classroom*: London: nferNelson.
- Wilson, R.A. (Ed.) (1994). *Environmental education at the early childhood level*. Washington, DC: North American Association for Environmental Education.
- Wilson, C. L. Marks Woolfson, and Kevin, D. (2020): "School environment and mastery experience as predictors of teachers' self-efficacy beliefs towards inclusive teaching," *International Journal of Inclusive Education*, vol. 24, no. 2, pp. 218–234, 2020.
- Wiyahnyuy, L,F (2001): *The Competency Based Approach in Cameroon Public Secondary Schools: Modes of Appropriation and Constrains*. In *International Journal of Humanities Social Sciences and Education (IJHSSE)* Volume 8, Issue 1, PP 92-103 ISSN 2349-0373 (Print) & ISSN 2349-0381 <https://doi.org/10.20431/2349-0381.0801011> www.arcjournals.org I
- Wong, H and Wong, R. (1998). *The First Days of School: How to Be an Effective Teacher*. Mountainview, California: Harry K. Wong Publications, 1998
- Wragg, E.C., & Brown, G.A. (2001). *Questioning in the Primary School* (2nd ed.). Routledge. <https://doi.org/10.4324/9780203420072>
- Wright, D & Wiese, M. (1988) *Teacher Judgment in Student Evaluation: A Comparison of Grading Methods*, *The Journal of Educational Research*, 82:1, 10 14, DOI: [10.1080/00220671.1988.10885858](https://doi.org/10.1080/00220671.1988.10885858)

- Yorke, M. (2003). *Formative Assessment in Higher Education: Moves towards Theory and the Enhancement of Pedagogic Practice*. *Higher Education*. 45 (4): 477-501.
Doi:10.1023/A:1023967026413
- Zahorik J.A. (1968) *Classroom Feedback Behavior of Teachers*, *The Journal of Educational Research*, 62:4, 147-150, DOI: [10.1080/00220671.1968.10883794](https://doi.org/10.1080/00220671.1968.10883794)
- Zeliff, N, D. (2000): *Alternative assessment*. *National Business Education yearbook*, Pp91-102
- Zuzovsky, R. (2009). *Teachers' qualifications and their impact on students' achievement findings from TIMMS-2003 data in Israel*. *IERI Monograph Series: Issues and Methodologies in large scale Assessment*, 2, 37-62.

BIBLIOGRAPHY

- Abbott, R. D. & Falstorm, P. (1977). 'Frequent Testing and Personalized Systems of instruction', *Contemporary Educational Psychology*, 2,251-257.
- Airasian, P. W. (1989). 'Classroom Assessment and Educational Improvement'. In L. W. Anderson (Ed.), *The Effective Teacher*. New York: Random House.
- Almi, M & Genishi, C. (1979). *Ways of Studying Children*. New York: Teachers College Press.
- Ames, C. (1984). *Competitive, Cooperative and Individualistic Goal Structures: A Cognitive Motivational analysis*. In R. E. Ames & C. Ames (Eds.), *Research on Motivation in Education: Vol. 1. Student Motivation*. New York: Academic Press.
- Anderson, L. M. & Evertson, C. M. (1978). *Classroom Organization at the Beginning of School: Two Case Studies*. Paper presented to the American Association of Colleges for Teacher Education (February), Chicago.
- Ashton, P. (1981). 'Primary Teachers' Aims, 1969-1977'. In B. Simon & J. Willcocks (Eds.), *Research and Practice in the Primary Classroom*, 26-35). London: Routledge & Kegan Paul.
- Bachor, D. G. & Anderson, A.
- Atjonen, Päivi. (2014). Teachers' views of their assessment practice. *The Curriculum Journal*. 25. 10.1080/09585176.2013.874952.
- Bloom, B. S. (1986). 'Ralph Tyler's Impact on Evaluation Theory and Practice', *Journal of Thought*, 21., 36-46.
- Book, C. L. (1985). 'Providing Feedback: The Research of Effective Oral and Written Feedback Strategies', *Central States Speech Journal*, 36,14-23.
- Boostrom, R. (1991). 'The Value and Function of Classroom Rules'. *Curricidian InquirY*, 21,2,194-216
- Chein, I. (1981). 'Appendix: An Introduction to Sampling' Holt: Rinehart & Winston. In Kidder, L. H. Selltiz,
- Clancy, J. & Ballard, B. (1983). *How to Write Essays: A Practical Guide for Student*
- Deale, R. N. (1975). 'Assessment and Testing in Secondary School', SCEB 32, London: Methuen.
- Deci, E. L. & Ryan, R. M. (1985). *Intrinsic Motivation and Self-determination in Human Behaviour*. New York: Plenum
- Deci, E. L. (1975). *Intrinsic Motivation and Self-determination in Human Behaviour*. New York: Irvington.
- Gronlund., N. E. & Linn, R. (1990). *Measurement and Evaluation in Teaching*. New York: Macmillan.
- Guba, E. G. (1978). *Towards a Methodology of Naturalistic Inquiry in Educational Evaluation*. Monograph Series no. 8. Center for the Study of Evaluation, University of California
- Keddie, N. (1977). *Classroom Knowledge*. In M. Young (Ed.), *Knowledge and Control*. London: Collier Macmillan

APPENDICES
APPENDIX A: INFORM CONSENT FORM

Hereby Certifies that

ENOW CECILIA NKONGHO

has completed the e-learning course
ETHICS REVIEW OF SOCIAL RESEARCH ON HEALTH RELATED TOPICS

with a score of

95%

on

01/08/2020

This e-learning course has been formally recognised for its quality and content by the following organisations and institutions



Global Health Training Centre

globalhealthtrainingcentre.org/elearning

Certificate Number d4d7beb3-d597-4139-9e19-813e6e44e720 Version number 1

APPENDIX B: QUESTIONNAIRE FOR TEACHERS

A QUESTIONNAIRE ON THE TOPIC ‘The Influence of Teachers’ Characteristics and School Environment on the Implementation of Classroom Assessment Practices

Dear respondent, good day please. I am Enow Cecilia Nkongho, a PhD fellow in the University of Yaounde 1, Department of Curriculum and Evaluation, Specialty, Docimology. We are carrying out a research on the above topic on the. Our presence here is to plead with you if you could answer these questions honestly and be assured that your answers will be treated with strict confidentiality. Do you agree to answer to the following questions? Yes
No

Section A: Teacher Qualification

Age range of teacher: <25 25-40 >40

Gender: male Female

1. What is your academic qualification before you started teaching?

1. PHD 2. Masters 3. 1st degree 4. A’ level

2. What is your professional certificate

1. Dipes II 2. Dipes I 3. Others- 4 . None

3. How long was your pre-service training

- a) 2 years b) 3 years c) months d) none

4) Are you having certification or teacher licence?

- a) Certification b) Licensure c) Both d) None

5) Professional development is eminent while teaching SA A SD D

6) Possibility to further training SA A SD D

Section B: Teaching Experience

7) Time for lesson is use deliciously for academic work

8) Number of years of teaching 11+ 8-10 4-7 ,1-3

9) Indicate recycling activities you have attending with the last academic year

- a) Conference/seminar b) Conference c) Seminar d) None

10). Please indicate other professional development activities you have taken part in

1. None 2. Seminar 3. Conference 4. Others, specify

11). For how many years have you been setting

- a) 10 and above b) 5-9 c) 1-4 d) Never

12) For how long have you been Marking national examination) 10 and above b) 5-9
c) 1-4 d) Never

Section C: Class size

13). How many students do you have on average in your classes?

1. 25 2. 50 3. 75 4. 100 and above

Section D: Teacher Motivation

	Opinion statement	Opinion			
		SA	A	D	SD
14.	Teachers have a well defined status in Cameroon				
15.	Teachers have outstanding incentives and salary that push them to work				
16.	Teachers working conditions is good				
17.	There is job security for teachers				
18.	The urge to become autonomous push me to join teaching				
19.	I became a teacher because most of my friends are teachers				
20.	My intrinsic recognition is my motivation force				
21.	Incentives are given for professional development training				

APPENDIX C: QUESTIONNAIRE FOR STUDENTS

A QUESTIONNAIRE ON THE TOPIC ‘The Influence of Teachers’ Characteristics and School Environment on the Implementation of Classroom Assessment Practices

Dear respondent, good day please. I am Enow Cecilia Nkongho, a PhD fellow in the University of Yaounde 1, Department of Curriculum and Evaluation, Specialty, Docimology. We are carrying out a research on the above research topic. Our presence here is to plead with you if you could answer these questions honestly and be assured that your answers will be treated with strict confidentiality. Do you agree to answer to the following questions?

Section A: Class size

1. How many students are there in your class?

1. 25 2. 50 3. 75 4. 100 and above

	Opinion statement	Opinion			
		SA	A	D	SD
2.	The teacher always gives lessons objective when teaching a large class				
3.	Smaller class allows more time to carry out different forms of assessment				
4.	How strongly do you agree that huge class size cause teachers to use only test to assess students				

	Opinion statement	Opinion			
		SA	A	D	SD
5.	Students participation in the construction of classroom assessment				
6.	Self-assessment is practiced in our lessons				
7.	The teacher uses many different methods to assess students				

8.	Students participate in the construction of the marking guide				
9.	Students assess each other very frequently				
10.	Students should be part of the assessment planning				
11.	Assessment should measure achievement and progress				
12.	There is need to assess teachers assessment levels yearly				
13.	Teachers write positive comments on your scripts before sharing to students				
14.	Students are assessed many times within a sequence				
15.	Classroom assessment is done daily				

APPENDIX D : CLASSROOM OBSERVATION PROTOCOL

Describe the structure of the lesson that you observe. What is happening in the classroom at the beginning, middle and end?

1. Start of the class
2. Review main topic from previous lesson
3. Ask review question
4. Ask for alternatives, rephrases students answers and humour
5. Introduce new topic
6. Clearly write out the objectives of the lesson
7. Are the technology/device/resources been used as part of the activity
8. Students' active participation in the learning process
9. Students' timely completion of class task
10. Evidence that students have mastered the lesson objective such that they remain on track for the unit plan

APPENDIX E: FOCUS GROUP GUIDE FOR TEACHERS ON WORK ENVIRONMENT

1. How would you describe your work environment?
2. Do you use the staffroom for departmental meetings?
3. Are you allowed to receive parents in the staff rooms?
4. Do you people face any threats?
5. What is your appreciation of the shift system?
6. How has corona virus affected your teaching?
7. Apart from the corona virus, is there any other crisis affecting education in this region?

APPENDIX F: STATISTICAL SIGNIFICANT TABLE

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384